CRASH
ZX SPECTRUM
A NEWSFIELD PUBLICATION
No. 29 JUNE 1986
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I thought I was buying an eight event sports simulation but for me it means nine!
I've got to wrestle my brother first to get to play it! Watch out Daley I'll be your first real competition. Well I started on a high, Pistol Shooting, no problem for 'Dead-eye Daley' and then Cycling, boy I can really punch those pedals – like they say – "when you're hot – you're hot." Then Spring Board Diving, okay so I keep hitting the water backside first! The rest was down hill, but I nearly pulled his arms off in The Tug O'War!
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I missed the film but I've got all the action here...in fact if Thorn EMI wanna make Rambo Strikes Back all they have to do is film me in action on this joystick. I picked up my machine gun, wiped out half the jungle with my explosive war head, (that's not my brain!), but that look-out post just keeps on zapping me – I'll get him next time round. I haven't got to the chopper yet... I've got to get my act together, if Thorn EMI saw my last attempt it'd only be good for Rambo Carries on Laughing!
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XARE
OR THE
NOSED
YER

The instructions tell me I'm Donovan, with a mission..., wow, that guy's a real keep-fit freak, the next thing I knew I was running down the corridors of the Mother Ship, yeh, running!, just a quick flip on the joystick and I was jumping head over heals, a real Halleys Comet job over some lazer crazy robot. Then I got into the communiputer – laying charges to blow the ship to kingdom come, collecting the RED DUST formula and getting wised up on them robots...hey, I'll have to see you later, things are getting a bit freaky!

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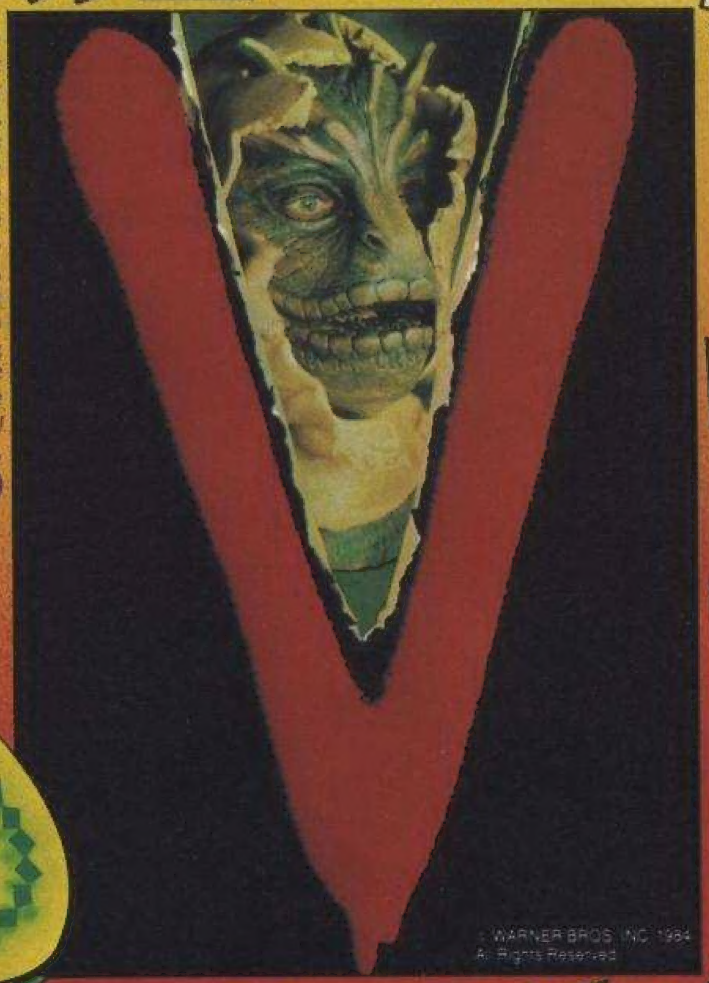


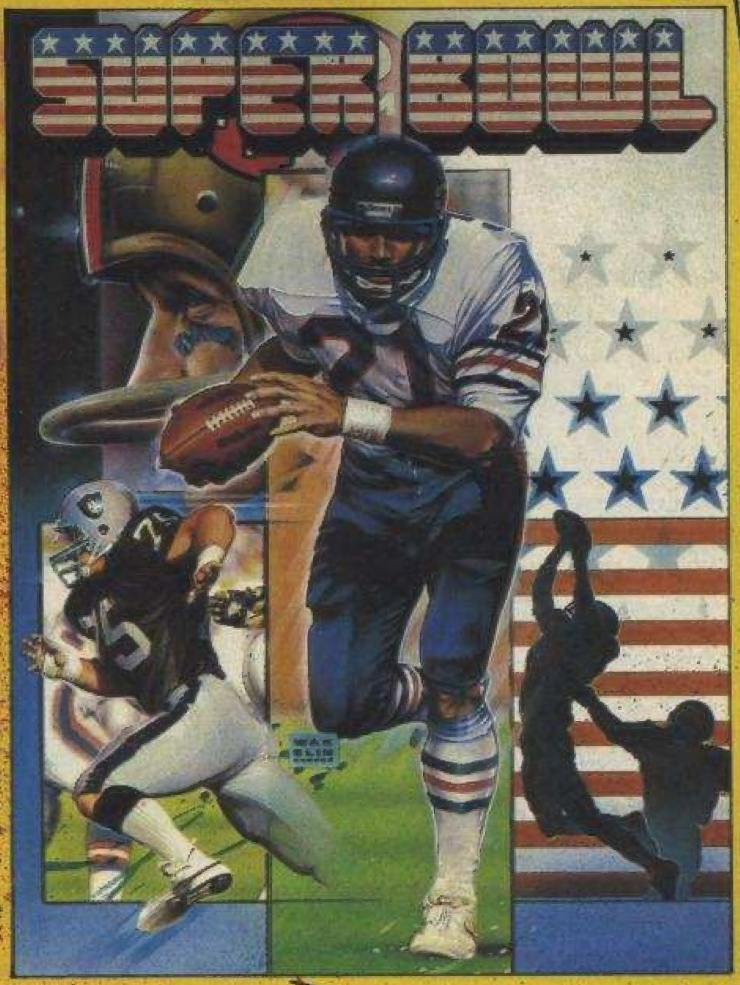
ZAP

Steve B.

THUD

9·95

If only the 'Refrigerator' could see me now, he'd be turning on his joystick and running for the changing rooms. I've got all the gear, these crazy shoulder pads and all, I look like Sue Ellen in a crash hat. Anyway it's my turn on the ball and I'm going for a 'RUSH PLAY' – that's real heavy goal-line play and...GORDON BENNETT!!!... I felt that block...now I know why he's called the 'Refrigerator'.



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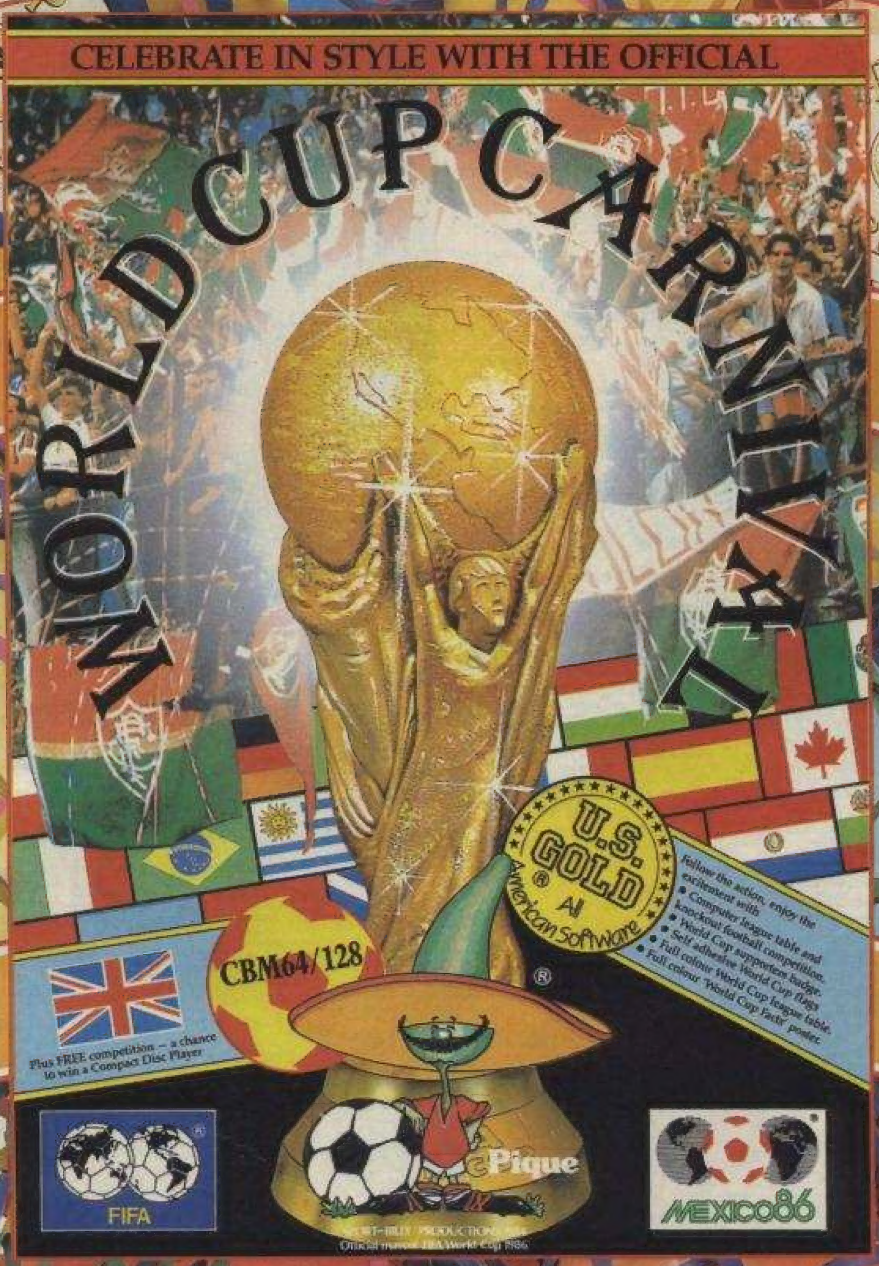

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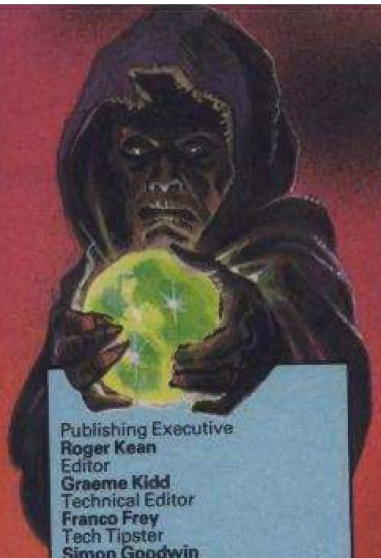

CRASH

ZX SPECTRUM

ISSUE No. 29 June 1986

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FEATURES

38 OF MYSTICAL NUMBERS . . .
Harness the power of the MYSTICAL SUBSCRIBER NUMBER and get it working for you
49 GENESIS: THE BIRTH OF A GAME
Your chance to collect a cash prize of at least £1,000 as we start off a six month feature on the creation of a game
54 THOROUGHLY STARSTRUCK
Hannah Smith takes a trip to Leeds and finds out about the people behind Realtime Games Software, the 3D Masters
98 GATHERING GAMES TOGETHER
Graeme Kidd examines the current craze for compiling old (and not so old) titles onto software albums

DIY

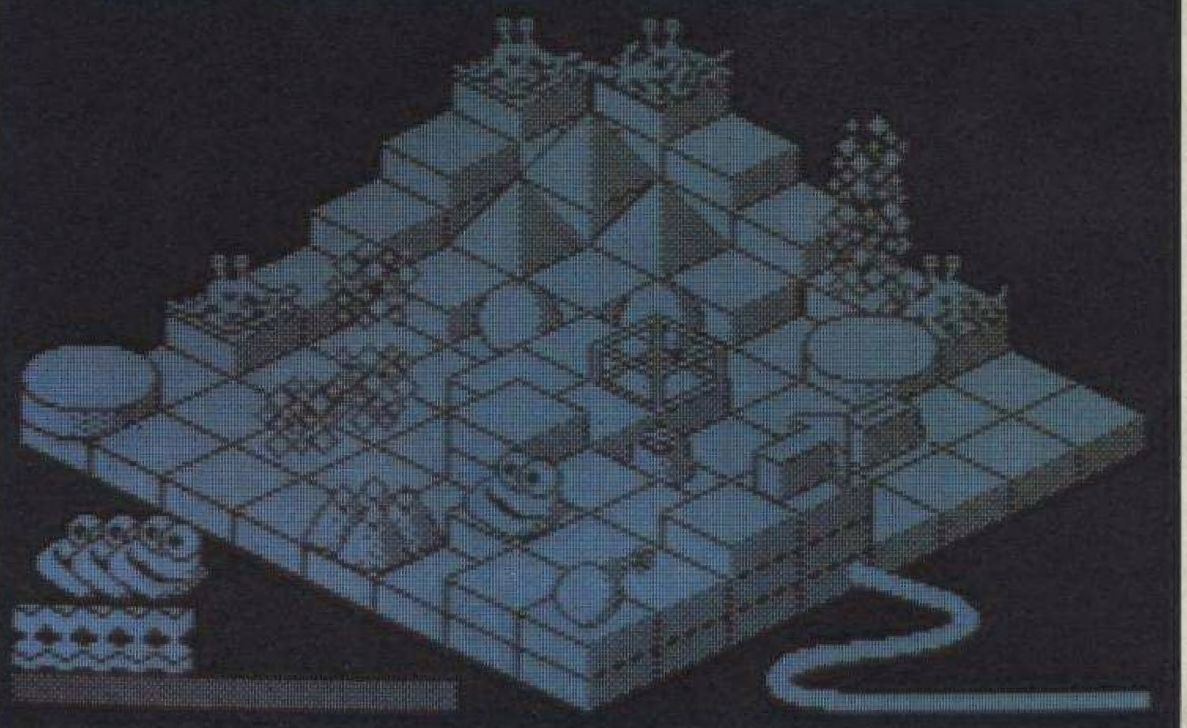
52 A CHANCE TO GET YOUR VERY OWN RAT
CCS have set a few brain teasers of a historical nature, and are going to reward fifty lucky winners with a copy of DESERT RATS
57 THE BATCOMPETITION
Holy Free Games Robin! Delve into the Batsquare, find the Batwords and win a Batgame . . .
462 TEMPT A SAILORMAN'S PALATE
MacMillan are re-releasing POPEYE and have some nifty wall clocks, alarm clocks, T Shirts and games to give away in this culinary competition
75 GET WITH THE BEAT
A TECH NICHE competition, which tests your musical knowledge. Three SPECDRUMS on offer, plus money-off vouchers for anyone who gets the answers all right
97 THIRD 128K COMPETITION
Did you keep that coupon nice and safe from the last issue? Good. Now you can have one more go at winning a 128K Spectrum, courtesy of Newsfield

REGULARS

7 EDITORIAL
11 NEWS
Catching up on the CES Show, ZX Microfair and a few other interesting developments
14 FEAR AND LOATHING . . .
Hunter S Minson staggers round from software launch to software launch in a Bloody Mary induced haze of near consciousness
41 LLOYD MANGRAM'S FORUM
Another delve into the postbag brings up a host of chit chat, tittle tattle and opinion which Lloyd presents for your entertainment
58 CRASH COURSE
Rosetta takes a look at some revision software this month
64 HANNAH SMITH'S PLAYING TIPS
A lady takes over from Robin and introduces a Map Extravaganza as well as a host of tips, hints and POKEs
74 TECH NICHE
Continuing the round up of matters more technical with a bit of music to help the hardware go down!
79 SIMON GOODWIN'S TECH TIPS
Simon delves inside the CRASH 128K Spectrum and finds some very interesting things lurking there. And the listing for his SpecDrum routine appears at last. (Oops!)
82 RESULTS
Yet more lists and lists of lucky winners' names in the monthly prize share-out
84 PBM MAILBOX
Brendon Kavanagh does his bit to increase the Post Office profits, starting a new column on Play By Mail games
87 DEREK BREWSTER'S ADVENTURE TRAIL
Derek's heavily into HEAVY ON THE MAGICK, amongst other things this month
92 SIGNSTUMPS
More tips and hints on Adventuring, followed by the usual mix of opinions in the Adventure Forum
102 CRASH HOTLINE AND ADVENTURE CHARTS
106 HOME GROWN SOFTWARE
A peek a games written at home, plus a plea for more . . .
108 SEAN MASTERSON'S FRONTLINE
Another look at DESERT RATS in a new improved format, together with the FRONTLINE FORUM. Mr Masterson's buried under letters nowadays
113 ON THE SCREEN
The CRASH Readers Gallery in which fame and fortune tempts computer artists
121 MERELY MANGRAM
Lloyd gets his teeth into the news of up and coming games, and we take a look at GHOSTS AND GOBLINS and BIGGLES amongst other things . . .

Summertime fun, available in the form of the July CRASH, out on 26th June

KIREL



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CRASH
ZX SPECTRUM

Budget software labels are on the increase, and budget games are getting better, slowly.

This must represent a "good thing" for most Spectrum game players, as ten pound game seems to have become the norm. While you usually get more game the more you pay, it's not always the case.

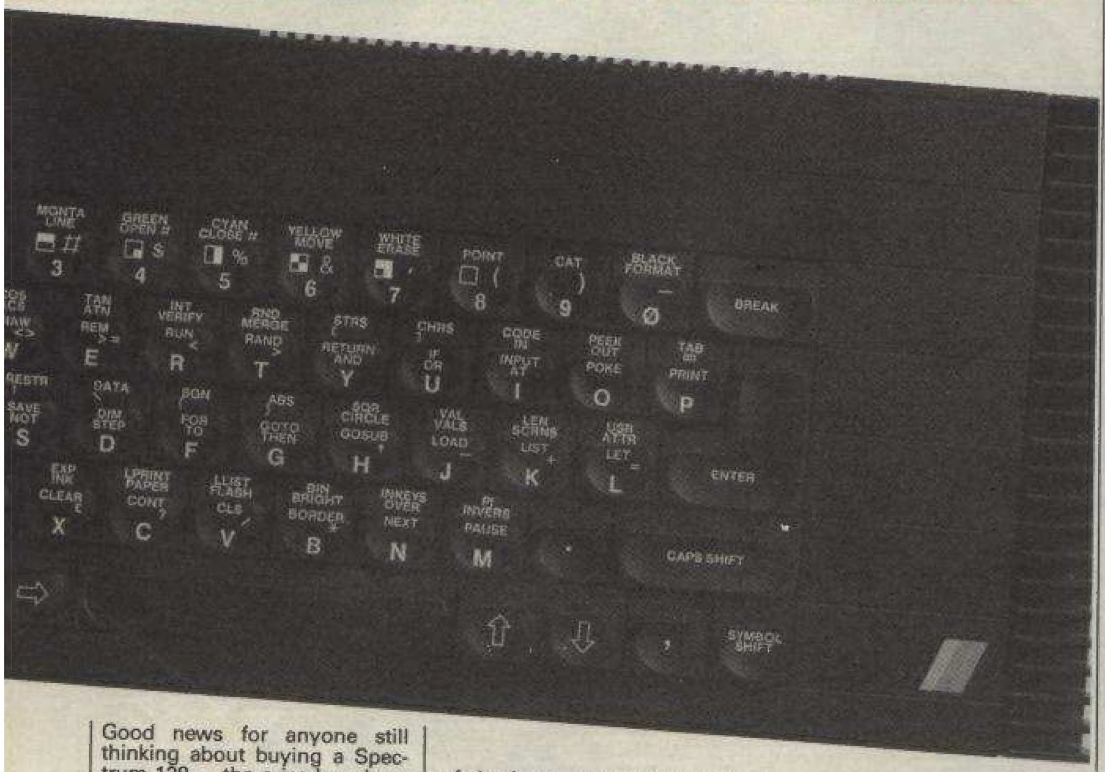
Mastertronic, without doubt, lead the field in the budget market — dominating the industry charts to the extent that a debate is raging about whether budget games should be excluded from the mainstream charts and put tidily somewhere else where their success is not quite so evident. From the point of view of a lot of retailers, budget games are bad news. You see, the mark up they make on a £1.99 or £2.99 cassette is much less than on a 'full price' game, yet it takes up the same amount of shelf space and the same amount of time, trouble and paperwork is involved in getting the cassette onto the shop and on the shelf. More units have to be sold to achieve a given level of profit.

Perhaps retailers, distributors — and programmers, who generally receive a royalty based on unit sales — are now prepared to support budget ranges. The high volume, low margin approach has been seen to work very well, with titles like Firebird's *Booty* crossing the 100,000 barrier. Far better to have 100,000 5p's than 5,000 25p's if you are a programmer who lives on royalties!

Perhaps there's a hint of irony in the fact that the first totally new and original game to be released for the 128K Spectrum is in fact a budget game: David Jones' *Knight Tyme*, released by Mastertronic on their MAD Range. The economics of budget software publishing have been seen to work, and more and more companies are following the trend. Not all cheapo games are good quality, but the budget game as a respectable product is here to stay.

Graeme Kidd

DEALING OUT THE CARDS?



Good news for anyone still thinking about buying a Spectrum 128 — the price has dropped already, and the first CRASH Smash has just been awarded to an original 128 game!

As we sent this issue to press, the first rumours of a new Amstrad/Spectrum games machine began to circulate. Mutterings about a Spectrum based machine with 256K memory sold as a super games machine for under £200 were heard.

The rumour has it that **Astron** cards — credit card sized slivers of plastic containing programmable memory chips — will be used. Maybe this is what Alan Sugar meant by controlling the Spectrum software market. If Amstrad do come up with an economically viable games machine which effectively uses non-piratable cartridges to load games (which will almost certainly push the price of games up), they may be able to control whose programs actually get put onto the cartridges.

Fortunately for all existing Spectrum owners, there's little danger of Amstrad dominating the cassette software market in the way they have come to preside over the home computer hardware market in this country. There's no sign, as yet, of the software 'approval' scheme that Alan Sugar hinted at during the announcement of his company's acquisition of a large chunk of Sinclair's assets.

MORE AND MORE . .

This issue of CRASH sees the start of several new sections in the magazine. **Brendon Kavanagh** kicks off a regular column on the Play By Mail gaming world with an introduction to the mechanics of such games, and will be contributing news, views and reviews on the Play By Mail scene on a regular basis.

Rainbird have kindly agreed to sponsor an Art Gallery section, in which CRASH readers get the opportunity to 'hang' their SCREEN$ creations on a page in the magazine and then on their wall at home in the form of a full colour screen dump produced by Dimension Graphics at Rainbird's expense.

For the next six months we will be watching the development of a new game for Christmas — a game which will be designed by a CRASH reader, programmed by **Design Design** and taken to the marketplace by **Domark**. We'll provide a monthly update on progress, and reveal lots of the secrets that lie behind the process of getting a game into the High Street shops.

And a section on 'Home Grown Software' begins gently, in which we take a look at some of the games you have been writing, rather than playing.

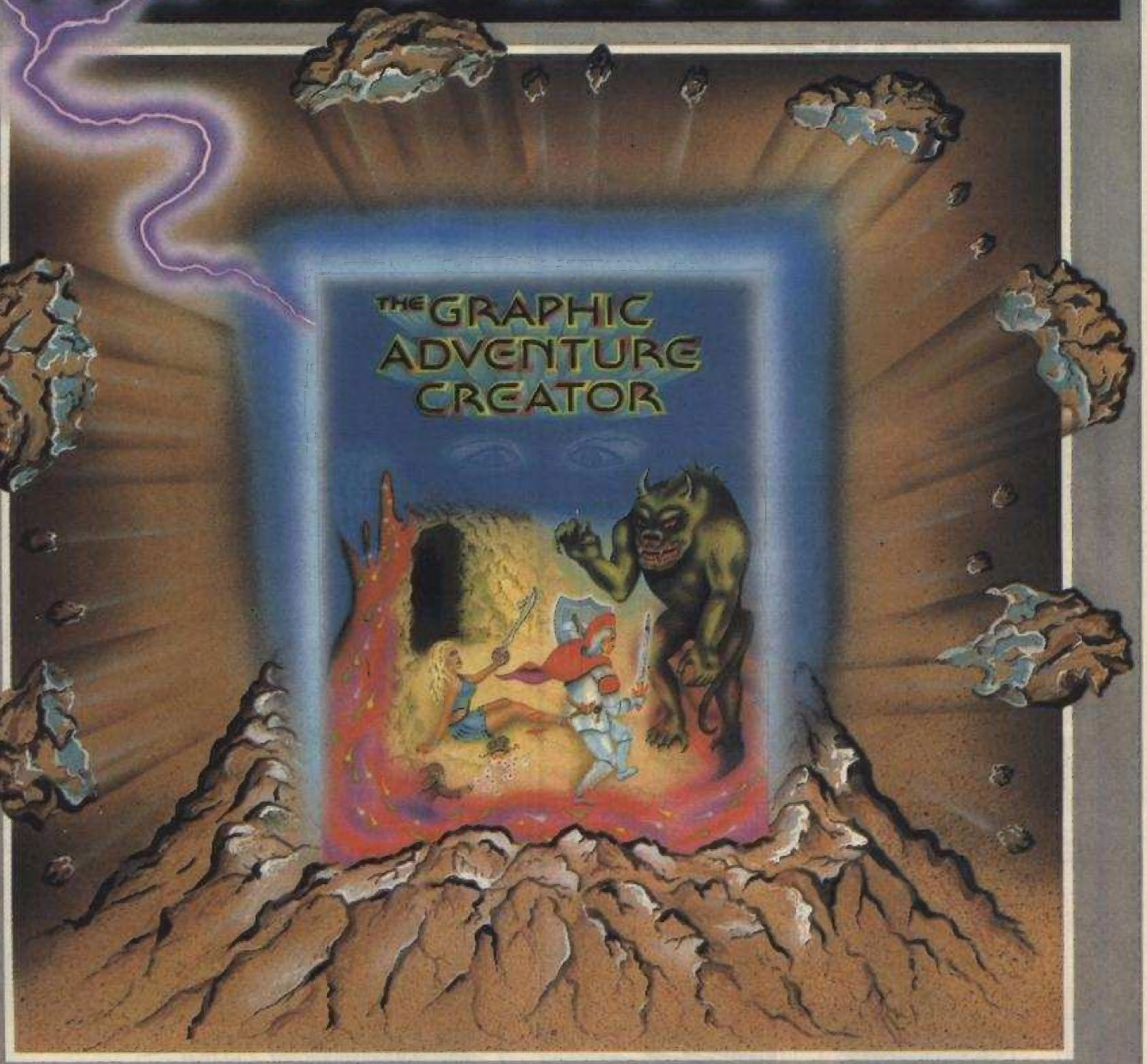
There's never been a better time to subscribe to CRASH! Apart from the new things that are happening between the covers, the power of the MYSTICAL SUBSCRIBER NUMBER has finally been harnessed, bringing a host of goodies into the laps of readers whose copy of CRASH arrives through the mail. Take a peek at Pages 38 and 39 and see if you can resist the temptations on offer!

ADVERTISERS' INDEX

Addictive	6
Alligata	126
A'N'F	40
AT & Y	91
Beyond	125
Classified	107
CRASH Mail Order	112
CRASH T Shirts and Binders	105
CRASH Subscriptions	38, 39
CRASH posters	28, 29
CRL	25
Digital Integration	61
Domark	135
Elite Back Cover	
Gargoyle Games	86
Global	47, 77
Gremlin	22, 139
Hewsons	27
Imagine	36, 37, 119
Incentive	9
Kempston	10
Lerm	91
Level 9	15
Mancomp	46
Melbourne House	53
Mikro-Gen	35
Mind Games	96, 114
Miracle	43
Mirrorsoft	45
Mosaic	33
Oliposters	28, 29
Ocean	2, 3, 56, 131
Probe	63
Quicksilva	85, 101
Rew	13
Saga	78
Superior Software	120
US Gold	4, 93, 104
Virgin	10

THE MONTHLY SOFTWARE STAR FOR YOUR US GOLD CALENDAR

·INCENTIVE·



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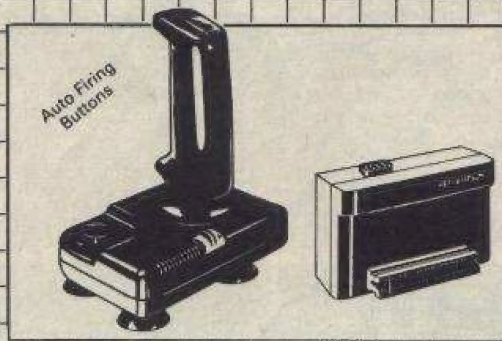

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KERRASH! N·E·W·S

VIRGIN HOPS INTO BED

If the press release is to be believed, **Virgin Games** and **New Generation Software** are 'apoplectic' with delight, having announced a deal between the two companies which gives Virgin all rights to the New Gen back catalogue and first option on seven new games. The first New Generation Virgin game is due out early this month, and is to be called *Cliffhanger*.

Nick Alexander from Virgin

●Virgin has become almost promiscuous of late, buying out **Leisure Genius** lock, stock and barrel. Nothing dramatic is about to happen in the near future on the Spectrum front, however — *Monopoly* is planned for the Amstrad machines and a version of the 80,000 unit seller *Scrabble* is apparently under development for Amstrad's 8256 personal word processing machine.

SORRY DEPARTMENT, Vol XX1

Apologies are due to **Macsen**, publishers of a range of TV gameshow games, including *Bullseye*, *Countdown*, *Treasure Hunt* and, of course, *Blockbusters*, which we attributed totally incorrectly to **Britannia Software** in the April review of *Play Your Cards Right*. Everso sorry, **Macsen**. Promise we won't do it again! Expect more reviews of Macsen products next issue . . .

GAMES MARATHON

A team of ardent Spectrum games players, decked out specially for the occasion in CRASH Hats and T Shirts, made a sponsored attempt at a computer game playing record down Aberystwyth way a while ago.

The event raised nearly £100 for Aberystwyth Womens Aid, and some mega-sessions were put in at joystick and keyboard. **Steve** and **Andy Wallis** clocked up a magnificent 69 hours apiece while two thirteen year olds, **Bobbie Richards** and **Ben** kept on going for almost 40 hours. "A Commodore owner who came along did three quarters of an hour", writes Carrol Muckersie, one of the event's organisers!

WIZARD WHEEZE PRANGED

Ever-youthful software supremo, Clem Chambers of **CRL** is a little disappointed having had to withdraw from a novel marketing ploy aimed at increasing CRL's penetration of the schoolyard marketplace.

Placing small classified adverts in the press seeking youngsters still at school interested in computer games and keen to earn money, Clem's company sought to recruit agents to sell CRL products on a commission basis.

Dreamsellers was the name of the ill-fated scheme, which collapsed under the weight of a few complaints — including one from an irate computer store proprietor who referred the scheme to the police, MPs and the Advertising Standards Authority.

"Anyone would have thought I was trying to sell heroin", the ebullient Mr Chambers moaned pitifully when we contacted him.

MICROFAIR — A FINE TIME HAD BY ALL

Our resident TECH TIPSTER Simon Goodwin escaped from his Black Country lair a few Saturdays ago, and scurried off to the May Microfair

Uncle Clive, Alan Sugar and the **PiMan** may have missed the May ZX MICROFAIR, but bargain hunters thronged nonetheless, and few left disappointed

Opus did a roaring trade in £100 Discovery Disc Systems — including a Spectrum 128 version with re-written software. Two video digitisers, from **Sunset** and an intrigingly named Dutch firm called **Data Skip** made an appearance. These gadgets let you load pictures from a video camera or recorder into your Spectrum. At £128 and £69 they are not cheap, but the possibilites for commercial software (besides *Sean Masterson Strip Diplomacy*) are interesting and the results look good. We hope to review both products soon.

Other hardware innovations included a radio-controlled joystick from **AGF** (review next issue) and a prototype percussion keyboard from **Datalink Systems** of Wales.

Fanzines were much in evidence and I picked up copies of the latest issues of Interface, and Games Monitor.

Interface Editor Lucien Randall conducted a fruitless search for new software on our behalf — it seems that the producers are more interested in shifting the last of their Christmas stock than in launching new games at the MICROFAIR this time of year.

Last month's tales of the QL's death were rather premature — **CST** had Thor, a new QL compatible machine at the Fair, and details of the Blackberry — a super QL designed by Sinclair escapees Tony Tebby and Jan Jones — were also circulating. The non-arrival of the prototype Blackberry was blamed on a powercut during development. Both 512K machines should sell for around £500.

If the attendance at the Fair dropped of in mid afternoon, that was only to be expected on Cup Final Day! The Sinclair market seems to be thriving still, despite the upset of the last couple of months . . .

ALL CHANGE AT AMSTRAD

Rapid developments on the 128K Spectrum front at Chateau Sugar lead to a price cut which Amstrad refer to as an unbundling rather than a price change. The machine on its own, without the two free games thrown in by Sinclair, should now be available for £139.95 as opposed to the launch price of £179.95 — which included 128K versions of *Daley Thomson's Supertest* and *Never Ending Story*.

The move is presumably aimed at shifting existing stocks of the 128K machine so that High Street shelves have plenty of space for a relaunched version of the machine in time for this Christmas. No firm details as to the form the 128K Mark II will take are currently available, but Alan Sugar, Amstrad's boss, has already spoken of 'glueing on' a tape deck and firmly spoken against including a monitor with the machine in an all-inclusive package.

Meanwhile, the first rumours of a new Amstrad computer using the Sinclair name have started circulating, referring to a 256K Spectrum which an industry pundit or two reckons should be in the shops by Christmas, selling for less than £200.

N·E·W·S

CES — THE PITS?

THE CONSUMER ELECTRONICS SHOW, held at London's Olympia during the last full week of April, was a bit of a damp squib as far as the home computer industry was concerned. Only a handful, albeit a fairly large handful, of software and hardware companies exhibited at the show, which was a quiet, slow paced affair according to most observers.

Amongst the names included in the show guide were Mirrorsoft who brought *Biggles* along to the Press Day and demoed early versions of *Biggles*, *Dynamite Dan II* and **Reflex**, and **Rainbird**, who used the show to announce tie-ins with both **Level 9** and **Magnetic Scrolls** (a company specialising in adventures written for 68000 based machines). **Beyond** was the only other wing of British Telecom present — **Firebird** stayed at home on the nest for the duration of the show. **Mastertronic**, **Mikro-Gen**, **Durell**, **Cheetah Marketing**, and **Bubble Bus** also took exhibition space — **Tom Prosser** was available on the Bubble Bus stand to demonstrate an early version of his game *Icicle Palace*, which features trainee mega-hero and part time Space Council worker, Nick, on a quest to recover his 1600 Turbo Cruiser, pinched by a joy-rider. Nick finds himself inside a giant thermionic reactor, and has to find eight sections of the reactor and dispose of them appropriately in order to prevent a race of evil aliens from attaining galactic domination.

Very little in the way of new home computer product was in evidence: Amstrad stayed away, even though their range of Consumer Electronics equipment is much wider than home computers. The most popular area of activity was Satellite Television — half a dozen companies were pointing giant dishes into the ether, plucking out foreign TV broadcasts for the amusement of visitors to the show. One lady spent most of her time chucking the contents of ashtrays and cat litter boxes onto a square of carpet and vacuuming the mess back up, while row upon row of slick telephones looked on from their niches on other stands. It looks like the **Personal Computer World Show** in September is still set to be the main event of the home computing year.

PLAYERS PLEASE?

Richard Jones of **Interceptor** was at the CES show, proud to be launching a new budget label — **Players**. Players games will sell for £1.99 retail, and the range kicks off on 29th April with sixteen titles for the popular machines.

With luck, we should be taking a look at the Players in the next issue — Richard had examples of the packaging and a very neat promotional video on his CES stand, but no games running so we couldn't get a sneak preview organised in time for these pages! Lots of work has gone into the packaging design as well as the software, Richard assures us, and the new Interceptor venture aims to catch a significant share of the budget market.

Richard Jones of Interceptor, and now Players launching his new label at the CES show. As you can see, staying alive in the software business is a case of knowing how to keep all your balls in the air at the same time!

CHEETAH's NEATER METER

Cheetah Marketing, flushed with the success of the Spec-Drum (look for the competition in TECH NICHE this issue) had little to demo for the Spectrum when we visited them at the CES Show. Sadly, their sound sampler and MIDI interface for the Spectrum were not ready in time to appear on their stand. Our very own musical Maestro, Jon Bates has joined the queue for review units and we should be bringing more details of both the MIDI interface and the sound sampler, priced at £49.95 and £44.95 respectively, very soon.

FIREBIRD SET TO IGNITE THE ADVENTURE WORLD

The Signing Ceremony which is to lead to a new venture in the adventure world

The main contract signing extravaganza of the CES show involved British Telecom's self proclaimed 'leading edge' label, **Firebird**, and adventure masters **Level 9**.

Pictured here, gathered round the contract signing table on the Level 9 stand, are **Tony Rainbird** and **Paula Byrne** from Firebird and three members of the Austin family tying up the deal.

Rainbird will be marketing selected Level 9 products in this country and in the USA — the first of which is to be a revamped version of the *Colossal Adventure*, *Dungeon Adventure* and *Adventure Quest* trilogy. The Level 9 team are currently hard at work adding graphics to the trilogy and improving the language parser used in the original versions of the three adventure programs. A second multi-load adventure, provisionally titled *Knight Orc*, should be ready for release on the Rainbird label during September and a third Rainbird/Level 9 release is scheduled for December this year.

The agreement between Rainbird and Level 9 allows the Austins to continue as an independent software house, writing and marketing adventures under the Level 9 label — *The Price of Magik* is virtually complete, and should find its way into the shops any day now.

STAR HITS CES SHOW

The only STAR attraction at the Consumer Electronics Show was arranged by **Mirrorsoft** who invited the real Biggles to their stand to take a look at how work was progressing on the game of the film. Well, not the REAL Biggles, he didn't exist silly. Neil Dickson, star of the film which, as they say, 'should be at a cinema near you' right now.

A few more words about *Biggles* the computer game appear in the Preview section this issue and we hope to bring you a full review next month.

Neil Dickson, superstar extraordinaire trys his hand at the Amstrad version of BIGGLES the computer game at Mirrorsoft's CES stand while the ever youthful Greg Ingham, editor of trade paper CTW looks at the cameraman.

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Fear & Loathing

Free Lunch and Loneliness at the CES

There are many ways of obtaining bargain air travel but none so cheap as getting deported. Quite what I was doing in that state of undress at that time of the morning in central Stockholm is a story in itself, but as it has nothing at all to do with computers it will have to wait. This has been a packed month.

I was personally escorted from the plane at Heathrow under orders never to return — which I will — just in time to thumb a lift from a passing executive coach. A strange recognition of faces dawned through the alcohol induced haze. Good God — the computer press!

Quite by chance I had become a guest of **Ariolasoft**, launching their *Golf Construction Set* at Wentworth. This is of absolutely no relevance to anything as it will never appear on the Spectrum — though the remark of one Chris (*Think!*) Palmer, that it may encourage you all to buy a decent machine is more interesting! Keep sending the money, Palmer, if you want to escape the wrath of Spectral Mafia or I may tell them where you live!

I did do some sweet talking though and . . . yes, here at last is that photo of the lovely Mandy Barry indulging in a little, innocent bondage with two cowboys — a sight previously only thought fit for the sick minds of C64 owners! Is that the sort of micro you want to own?

This month's mega-lunch award goes to **Hewsons** though. Their Waldorf bash was so prestigious even Graeme emerged from his Ludlow den and with him the delightful Hannah on her first official outing. The occasion was, of course, the launch of *Quazatron*. Steve Turner is back on top form and never one to stop for rest (Andrew Hewson won't let him!) he's already writing the next test of strategy and reflexes.

Accompanying this was probably the best meal I'll eat all year — though other software houses are urged to try to better it! A three course sit down job with good company too. Inevitably the main topic of conversation was Amstrad's buy out of Sinclair. Nobody was able to tell me if Alan Sugar's purchase of all Sir Clive's trademarks includes that unmistakable shiny dome? Will the balding boffin now have to pay royalties on his pate or wear a toupe? I think we should be told!

THE PITS

I think we should also be told why the CES show was so feeble. The Spring preview of all that is electronic in home entertainment was meant to be a major bash. Instead no **Amstrad** — or any other hardware company — no **Activision, Ariolasoft, Ocean, U.S. Gold**. And where were the visitors? There was even talk of last minute advertising to open the hitherto exclusively trade show to the general oiks. It was so empty I had half an hour on a sun bed before anybody noticed!

One visitor who had obviously hoped to sneak in unannounced, late on the last day, was Sir Clive Sinclair (TM Amstrad Consumer Electronics plc) himself. How strange to suddenly find myself next to him in an Olympia bar — a location matching its lack of comfort with extortionate prices! Fumbling for the correct form of address for a Knight of the Chip I missed the chance to ask him a real question. Why was he there? Was it to suss out the competition in the cordless telephone or satellite receiver dish fields — both of which he is interested in? My guess is not. There were plenty of car radio aerials on display, so probably he was looking for the best to flog from the boot of a C5 — considered by many to be a sound marketing tactic!

CLOUD LONELY

I wandered damn near lonely as a cloud. Some bright things to report such as **Mastertonic** celebrating their second birthday in style with their chateau bottled brew — though sources inform me that gorgeous Alison Beasley was up all night converting Carlsberg cans with sticky labels! **Mikro-Gen** were previewing *Equinox*, a new arcade adventure with superb graphics, and dropping hints about Ricky 'Stainless' Steel — a hero who is definitely not in the Wally mode.

Mirrorsoft had the biggest stand for *Biggles* and poor Pat Bitton and the gang were risking insanity from constant exposure to the film's irritating theme. Meanwhile **Cheetah** are following up the spectacular Spec-Drum with a bargain basement sound sampler which digitally records noises for musical play back. Inevitably some wag had programmed in a flatulent effect and was busy farting around up and down the scale. Thank God they've not developed a smell synthesiser.

Round the corner Dave 'Cuddly' Carlos was busy peddling porn — or should that be *The Pawn*. No, it's definitely the former — an adventurer's wet dream! It's also the second piece of software to get mentioned here that will never appear on the humble Spectrum. Also on the **Rainbird** stand was Paula Byrne, still hung over from her farewell party at **Melbourne House**, two days before!

The Dark Side of Computing: Gorgeous Pouting Software Bondage Bird Amanda Barry. Previously only thought suitable for the eyes of depraved Commodore owners, this salubrious snap can now be made available to Spectrum 'gamesters' . . .

BAXTERED!

Further round the bend and **Beyond** with a decidedly dodgy video. No — not that sort but a poor quality preview of games to come. Through the snow I managed to decipher a new Mike Singleton mega-offering. As I did so the previously amiable Eligible Baxter pounced.

'You've got a printer belonging to one of my clients,' he said in claim-you-can't-deny tones . . . so I didn't deny it. Indeed I do have an Ibico LTR-1 Letter Quality printer, as distributed by **Saga Systems**.

And indeed I have been intending to review it but . . . So we did a deal. Here, first, is the Hunter S Minson review for this month.

The LTR-1 is a good quality printer, capable of handling A4 paper and producing pretty nifty results for the price via its testing, I can tell you. My only complaint is that it sounds like Sir Thomas Beecham's description of a harpsichord!

Which brings us to Mike's part of the deal. Obviously Saga can't sell the thing — stained as it is with spilt Bloody Mary — so they're going to offer this fine, albeit secondhand, device as a competition prize. Just write in, to the usual address, (**Third Bloody Mary on the Left, CRASH TOWERS, PO Box 10, Ludlow, Shropshire, SY8 1DB**) reminding us just what Beecham's description was (and it wasn't 'like an LTR-1'!)

First out of the cocktail shaker on 26th June gets the chance to print out junk like this.

And while I'm creating work for the post room, I've a request for help. There was a rumour round CES that (name removed at insistence of publisher's lawyers) is in fact a werewolf! Anybody offering proof of this leading industry figure's lycanthropy will be richly rewarded!

Right — that's enough of this drivel for now. It's that cocktail time of the morning again and I've already overfilled my space.

Next time, I'll be bringing you a Hewson attempt to get in *The Good Lig Guide* two months running. And if Graeme would like me to fly to Chicago to cover the American CES — which has all the razmataz this one lacked — I wouldn't be in the least surprised. What would surprise me is, if he'd pay for a return ticket!

Yours in food and ligging
Hunter S Minson

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Hiding GERALD inside a strange network of ramps. That octahedron on the top level is a power jewel

Still in Gyroscope form, GERALD's been snapped by ace lensperson Cameron Pound just as he takes a tumble into the middle of nowhere

Producer: Electric Dreams
Retail price: **£9.99**
Author: **Paul Shirley and Phil Churchyard**

Hanging in nether space, a region only recently discovered by the dimension dabblers, is Hangworld, a place of incredible wonders just waiting to be explored. And yes YOU have been chosen from a list of millions to be the lucky soul who gets the chance to take part in a journey of adventure and excitement charting out a brave new world. Not fooled? Okay, you'd better have it short and sharp then: *Your government wishes to inform you that you have been conscripted to serve in the military Cartographers Corps. Make your way immediately to the local Cartography Office where you will receive further information. Failure to conscript will result in dissolution. You have been warned.*

So, you pack up your belongings and prepare for a stint in nether space under the watchful eyes of the army. Nether space is the place where boys become men and men become dead. A rather hefty chunk of space is designated for your exploration — no less than 385 sections — but only a ridiculously small amount of energy is allocated to your exploration craft. Nervously sitting within GERALD, you craft's familiar name, the transducers hum and reality flickers out of view only to be replaced with Hangworld, a place of major danger, just waiting to destroy those who venture there.

As Cartographer Private, your Cartographer's Handbook explains, you have been allocated an area of Hangworld and must explore as much of it as you can. Such exploration is rather expensive, owing to the large amount of energy used by the reconnaissance craft in your command. Consequently, recruits are encouraged to find and collect energy crystals that are to be found around Hangworld. As the reconcraft comes into the immediate vicinity of a power jewel, its plasmagrabs are automatically activated and the crystal is collected and converted into pure energy.

Sitting within your craft, the view of the outside world comes via a computer monitor — an image showing the surrounding

S·P·I·N·D·I·Z·Z·Y

A CRASH Smash

GERALD's in Gyroscope form on this green screen. But how's he going to get at that power jewel?

CRITICISM

"Spindizzy is one of the most addictive games I've ever played on the Spectrum. The game rates high on originality owing to some very nice features, such as changing shapes, speed control and very fast changes in viewing angle — of course all these meant that the sound had to suffer, but the writers still managed to get in some good effects whenever possible. I loved trundling around the area and just seeing what all the places in this strange world looked like. All the other little features are very well animated — the lifts are especially good. Spindizzy is one of the fastest maze games I've played, and flicking between the screens is very smooth. Electric Dreams' latest release will keep all sorts of people attached to it for ages. Buy it, and see if you're one of them."

section from above with GERALD displayed on screen. Obviously, the image presented to you is computer interpreted, and as such is a bit lacking in detail, though there's enough visual information for you to negotiate the obstacles that encumber progress. The scanner is quite a versatile bit of equipment and its viewpoint can be rotated through four different vantage points. This is a handy feature if the craft is out of view behind some Hangworld scenery. If GERALD is guided off-view, then the scanner automatically flips to another section.

Controlling GERALD shouldn't present too many problems, even for a rookie cartographer. Four directional controls are supplied to propel GERALD along the ground. While GERALD is really designed for terra firma, it's possible to take to the air, though gravity quickly returns you to land. The fire button activates GERALD'S turbo unit which greatly increases your maximum speed. With a little practice, you can use the many inclines and ramps in Hangworld as jump off points for acrobatic feats — such manoeuvres are important if you are to map out the entire sector that has been allocated to you and GERALD.

GERALD has polymorph capabilities. At a mere keypress the person in the driving seat can change GERALD'S form into a ball, tetrahedron or gyroscope. Each incarnation has its own particular quirks when it comes to response to the controls, and though no one form has any strong advantage over the others, personal choice usually soon decides on one of the three you'll stick with.

Another aid to exploration is the lift system to be found around Hangworld. Left by an ancient civilisation long since departed, the system comprises a number of lift activator pads each bearing an insignia. Wander over one of these and all the lifts bearing that insignia are activated. Only two different types of lifts can be activated at once, and a scanner at the bottom left hand side of the viewscreen shows which lifts are operative.

Another handy on-screen window reveals how many sections remain unmapped. Pressing the map key draws up a screen which details the sections of Hangworld which have already been mapped out.

While Hangworld is under exploration, a time indicator shows how much time remains before GERALD's energy supply runs out. Extra time can be won by collecting power jewels, but a large chunk of exploring time is lost if GERALD is guided off the edge of a section into the oblivion in which Hangworld is suspended, as an enormous amount of energy is needed to transport you and GERALD back to safety. Falling off ledges or leaping ramps over-enthusiastically also results in energy losses.

Should time run out, you are regenerated on Earth only to be sent back to Hangworld once more to restart the mission. If, however, you return with your allocated section completely surveyed the Government allows you to resume the life of Private Citizen rather than Private Cartographer, and an Honourable Discharge from the Cartography Corps is your reward.

CRITICISM

"Well thank heavens for that! Electric Dreams have finally put out a good Spectrum product. Spindizzy almost makes up for the crime of releasing Winter Sports (nearly but not quite). Spindizzy really is very good indeed and is even original to some extent, though it does look like it was ultimately inspired by Marble Madness. The control, animation and graphics are all top hole, especially the 3D effect that adds a new slant on the Alien 8 style of game. While it's immediately great fun to play, there's a lot in Spindizzy to keep any Spectrum gamester glued to the screen. Overall a game that is not worth missing."

CRITICISM

"Brilliant! Spindizzy is by far the best maze game I've played on my Spectrum. The graphics are superb, and the over-responsiveness of the controls really adds to the game. It represents a really big challenge, and plays very well indeed. I don't think I can criticise it much, apart from the fact that it would have been even better if the character set had been altered. Beginner's levels, playability, addictiveness, good packaging: Spindizzy is a really nice game. Buy it: I think it represents State of the Art on the Spectrum today."

COMMENTS

Control keys: redefinable
Joystick: Kempston
Keyboard play: responsive, but tricky!
Use of colour: neat
Graphics: stunning
Sound: erm . . . pardon
Skill levels: one
Screens: 385
General rating: A very neat game — a very neat variant on the maze/mapping theme, brilliantly done

Use of computer	92%
Graphics	94%
Playability	94%
Getting started	91%
Addictive qualities	94%
Value for money	91%
Overall	93%

And so the saga of the Magic Knight continues, with David Jones' follow-up to *Finders Keepers* and *Spellbound*.

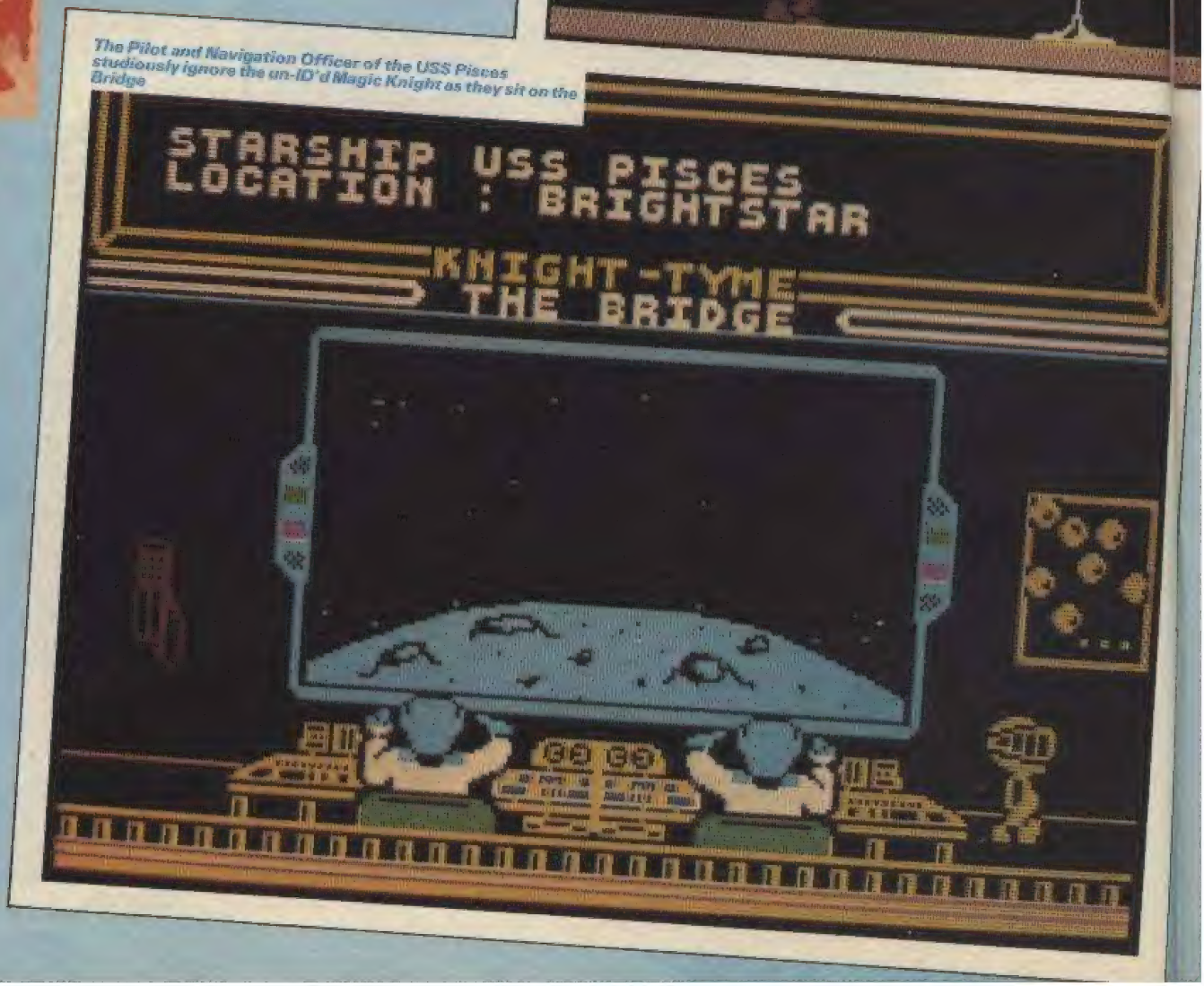
Knight Tyme picks up where *Spellbound* left off. Having released the wizard Gimbal from a nasty predicament at the end of *Spellbound*, Magic Knight is free to potter back to 13th Century England and the comforts of home. However, MK is understandably exhausted after his ordeals and his mental concentration is flagging somewhat. In an off moment he miscasts the spell to take him home, and lo and behold, he finds himself transported not to Mediaeval England as he had expected, but onto the deck of an intergalactic star cruiser in the 25th Century.

The culture shock alone should have been enough to finish off poor old Magic Knight once and for all. He's a resilient fellow, mind, and he has the good fortune to be presented with a Datacube once he arrives on the space ship which helps him to acclimatise to the new-found surroundings. Datacube or no Datacube, Magic Knight is singularly unimpressed with life on a sophisticated starcruiser and longs for the comforts of home—the odd bout of bubonic plague, rusty armour in the winter and being hungry all the

Producer: Mastertronic
Retail price: £2.99
Author: **David Jones**

The WINDOWIMATION system shown to advantage. Magic Knight stands to the right of the screen while the menu windows overlay each other as a sequence of commands is input

The Pilot and Navigation Officer of the USS Pisces studiously ignore the un-ID'd Magic Knight as they sit on the Bridge



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A CRASH Smash

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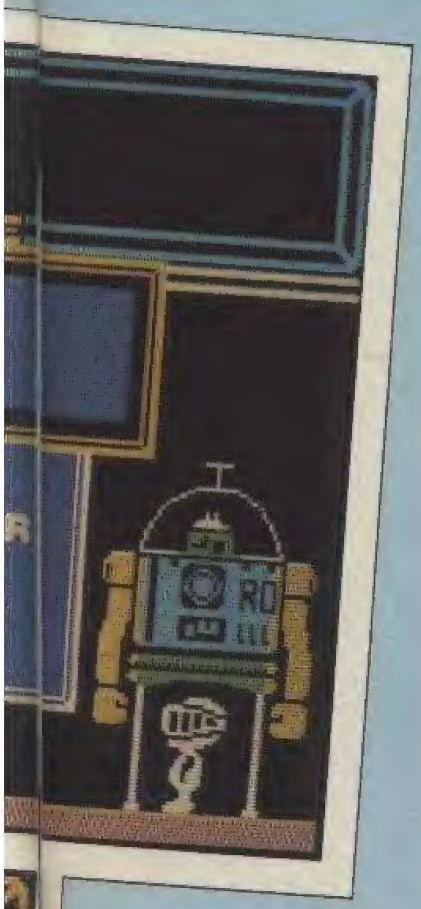


time. He's understandably anxious to find his way off the Starship USS Pisces.

This is not a simple task. He must find all the pieces of a time machine so he can assemble it and travel to his own time. The Paradox Police are waiting thirty days into MK's future, so there's a time limit in the game — if our tin suited hero doesn't locate the Tyme Guardians and get back into the past quickly enough, he'll end up in clink. Five Eyed Jack, king of the Space Pirates must also be avoided according to the inlay — he's a really nasty piece of work. A close watch must also be kept on Magic Knight's energy and happiness levels, for if they fall too low, he expires.

The first problem to be solved involves getting the human crew members to acknowledge your exisitence. Officially, Magic Knight is a stow-away, so in order to ingratiate himself with the crew of the USS Pisces he must somehow obtain an identification card — they're only prepared to hear the voice of officialdom. The droid members of the crew and Derby 4 — the Transputer — aren't quite as snobby as the human contingent. If you ask them nicely they may even help you get the ID card . . . This isn't much use on its own, as it is blank. MK must find a camera and some film and by being creepy to the robots on board, he has to arrange to have his photo taken, and then add the snapshot to the ID card which then confers an 'authentic' identification to the wearer. Once this is done Magic Knight can start giving orders to the crew members and begin bossing them about — very satisfying after their early rudeness. When the pilot has been provided with the appropriate equipment, Magic Knight can order him to drive round the galaxy — and a neat space-flight sequence pops onto the Bridge viewscreen during flight.

The player interfaces with the game via an improved version of the user friendly window/menu system that was christened **Windowmation** in *Spellbound*. Using either the joystick or keyboard, commands are given by selecting options from a series of nested menus that window onto the screen. A wide range of activities is catered for, including examining objects and characters in the game, giving orders, reading things, calling up status reports and so on. New options appear on the main menu as the game progresses and problems are solved.

The crew of the USS Pisces is an untidy mob — objects litter the decks. Some of these are helpful when it comes to solving the problems buried in the game, while others can be used to barter with the crew of the star cruiser. Magic Knight must somehow locate the mythical Tyme Guardians if he can and, if indeed they even exist, they'll supply him with his ticket home.

Sixteen separate characters can be found in the game, and there are nearly fifty locations for the USS Pisces to visit. Not all the planets are explorable, but the habitable ones are accessible via the transporter — once it has been fixed. Magic Knight must also get the co-ordinates right on the transporter or else his little tin molecules will be artistically splattered across the cosmos. Most of the parts of the time machine can be found on the planets, and some starbases contain communication centres which provide useful information.

Apart from the problem-solving aspect of the game, there's a fair old strategic element. It's vital to keep Magic Knight's strength up, but the player also needs to monitor the status of the other characters in the game and keep an eye on the condition of the Starship itself.

Don't forget — if Magic Knight never escapes from the confines of the USS Pisces, there won't ever be another Magic Knight game . . . .

COMMENTS

"I still play Finders Keepers at home so I was very pleased to play this one. This has to be the most outstanding piece of cheap software I've seen since I started reviewing for CRASH, two years ago. Perhaps all 128K software will be like this . . . but I very much doubt it. I can't really see myself getting bored with this one for a long time as it is very compelling. The graphics are excellent, all the characters are detailed and well animated and the backgrounds are very colourful. My only gripe is that there is a bit of colour clash. The sound is also excellent: a tune plays throughout the game and there are some spot effects. I strongly recommend this game to all 128 owners — and the 48K version will be snip as well. You couldn't hope to find a better piece of budget software."

COMMENTS

"Hooray! The follow up to one of my favourite games of '85 arrives, and a very good game it is too. The Windowmation is still an excellent piece of programming and adds to the game just as, if not more than the original system. The graphics are very good, and the sound is superb. For £2.95, it's brilliant value for money. I think Mastertronic had better get lots and lots of copies of this run, 'cause methinks its gonna be a hit."

COMMENTS

"Knight Tyme is the first 'proper' game on the 128 and I must say that I was very impressed. I thought the 128K version would just have more locations, but David Jones has certainly made full use of the of the 128K's features. The game is a very good follow up to the mini-Spectrum games, and combines some old ideas with some new ones. The thing that did impress me was the very olde wurlde music: this suits the game perfectly and doesn't ask to be turned down as on some games. I still love the way the Knight bounces around and can pester the little innocent creatures that roam around, by asking them to push off or go to sleep. The game again uses the beautiful windowing techniques that were employed in Spellbound. I would say that this game will well satisfy any 128K owner who's moaning about the 128K software machine, and at the price, 'you can't go wrong John'."

CRITICISM

Control keys: A up/jump, Z down, N left, M right, SPACE fire
Joystick: Kempston, Cursor, Interface 2
Keyboard play: responsive
Use of colour: pretty, and tidily done
Graphics: cute little characters, nice backgrounds
Sound: continuous jolly tune
Skill levels: one
Screens: 50 (25 in the 48K version)
General rating: Another excellent arcade adventure from David Jones. Stunningly good value for money.

Use of computer	90%
Graphics	89%
Playability	91%
Getting started	89%
Addictive qualities	93%
Value for money	98%
Overall	94%

Melbourne House's latest foray into the adventure world is something very different, as GARY LIDDON, in-house comicbook afficianado and comic character discovers . . .

Mild, meek and very wimpish reporter Kevin Oliver awakes outside a hospital with absolutely no memory at all, an empty camera in his hand and some small change. Obviously bedazed by his situation, the puzzled reporter searches his synapses and finds three words; two of them make up his name, while the third is puzzlingly meaningless — 'KWAH'. As any amnesiac reporter would, Kevin says the puzzling word and **Kablamm!**, what was previously a wimp is now a muscle encumbered man of steel dressed in red with a range of super powers as matching accessories. And then Redhawk remembers his mission to hinder the course of evil upon planet Earth. Another quick KWAH later and Redhawk is back into his civilian identity.

After a bit of interaction with the surrounding scenery and a little weeny read of the inlay, the problem to be solved soon becomes frighteningly apparent. Some incredibly naughty person has decided to bomb the local nuclear reactor. If the device deposited there does manage to pop its cork then it's goodbye to at least three quarters of Kevin's home town. Obviously something must be done, and the only effective solution seems to be a Redhawk one.

Despite Redhawk's rather impressive physical endowments, the answer to this particular problem doesn't depend totally upon brawn. Brain is the major talent needed to prevent the surrounding countryside being littered with bits of power station. The first thing to do is get a job at the **Daily News** as a freelance photographer. This gives Kev a supply of money as long as the Editor get a supply of crime piccies — quite an easy task when you're secretly a trendy superhero-around-town.

Six hours are available to Kevin/Redhawk before the bomb goes blam. To solve the problem of the exploding power station, our reddened hero must first sort out the mystery of who actually planted the device. As different characters are encountered and interrogated a veritable web of intrigue becomes apparent. Including the super hero himself, there are six main characters in the game, plus four supervillains who hinder the crusader along the way to truth and justice.

To complicate matters, most of the people around the place have a motive to destroy the power station and it's up to Redhawk, the great detective, to decipher who is behind this rather dangerous malarky. Once that's solved, then a way to prevent a rather nasty mess in the power station should become apparent.

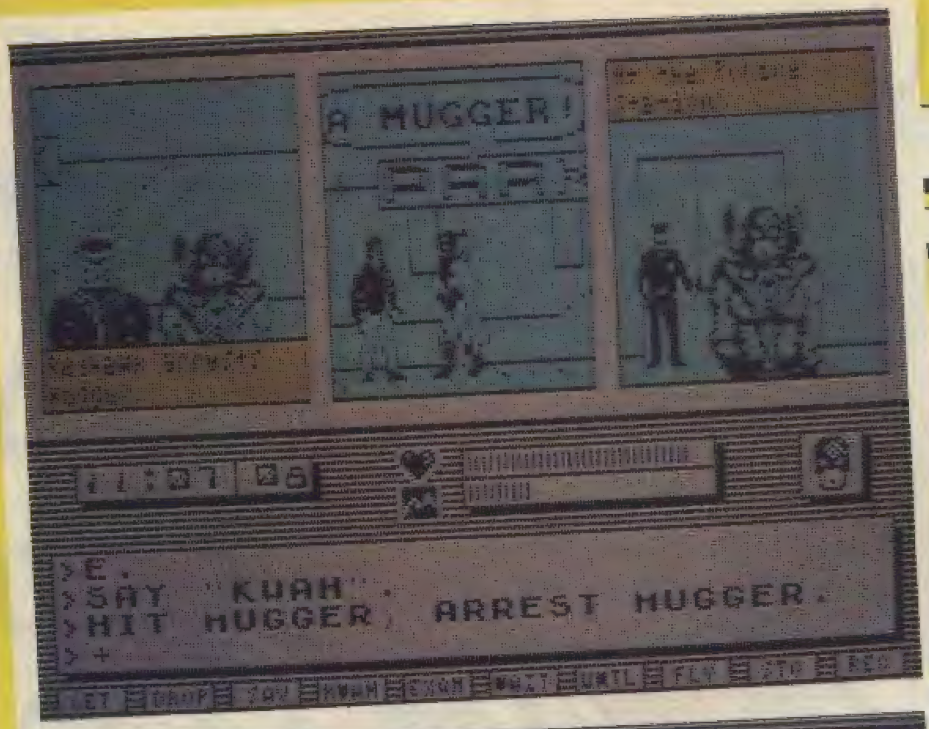
Like all superheroes, Redhawk finds his doings closely monitored by the media, and Redhawk's popularity rating fluctuates according the number of criminals he apprehends or allows to escape. If he gets really unpopular, no-one will talk to him — which makes solving the mystery rather difficult, but if Redhawk spends too long basking in glory and apprehending wrong-doers, he won't have time to investigate the dastardly plot that threatens the entire city. A fine balance has to be maintained throughout the game . . .

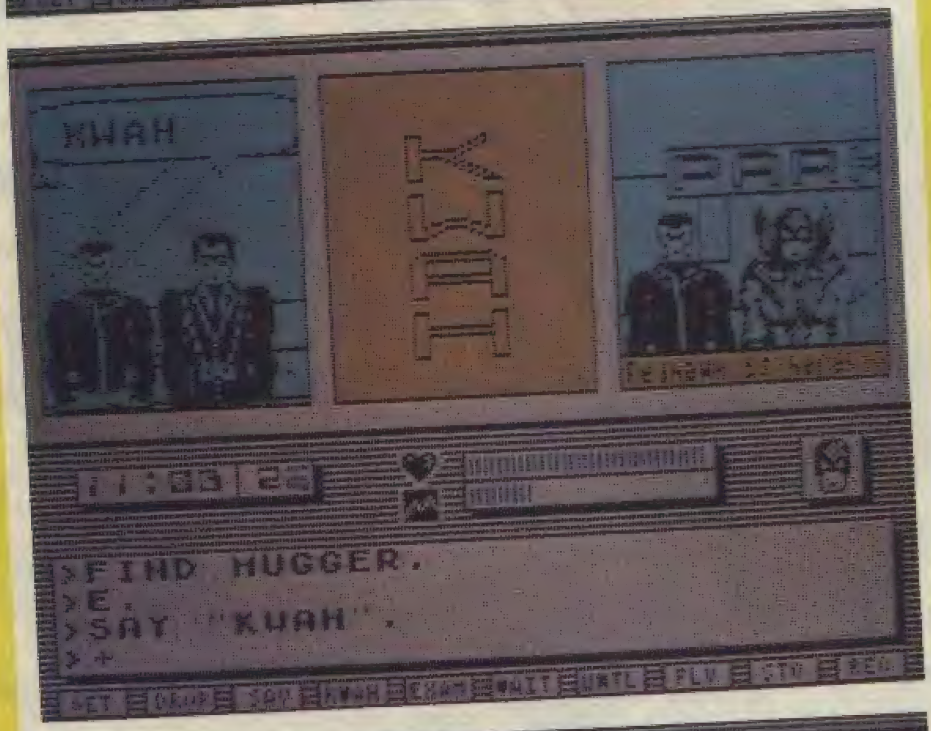
Redhawk marks quite a departure from the usual format of adventures adopted by most software companies nowadays, including those produced by Melbourne themselves. Developed by Simon Price and Mike Lewis under the name of Silhouette Software Systems, the whole project is an extension of *Adventure Games on the Amstrad*, a book the two lads wrote while they were still at polytechnic. The best way of describing *Redhawk* is as an interactive comic strip — the way the game works is hardly surprising as Simon Price scripts a comic strip by the name of *Redfox*. The main idea behind *Redhawk*, and principal difference between the game and most other adven-

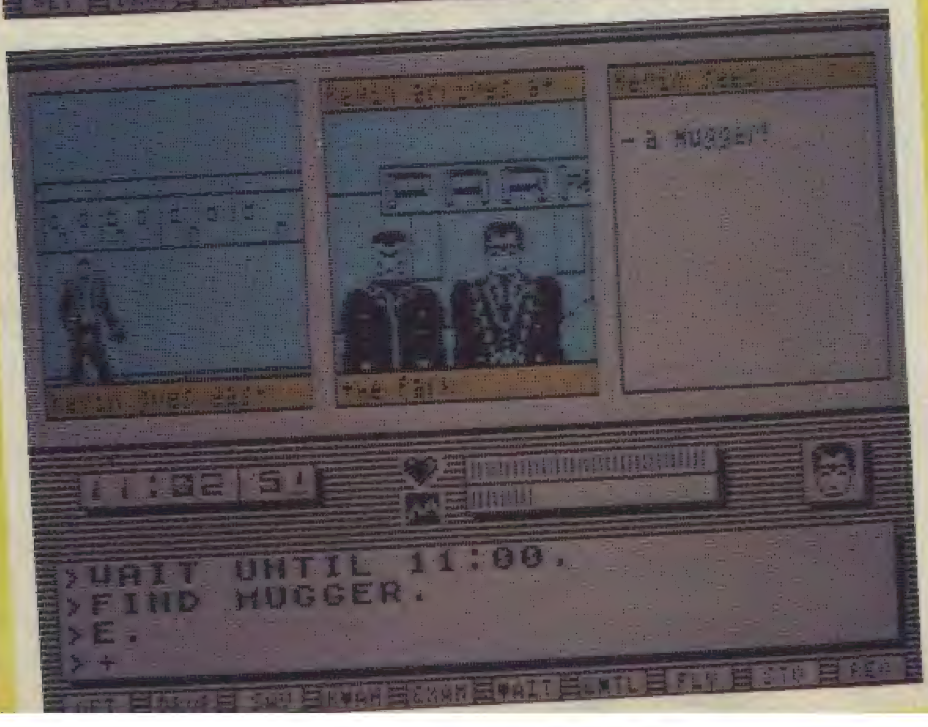
" Apart from the innovative stuff, Redhawk is replete with all the features that are needed in a competent but more traditional adventure game. Redhawk is easily accessible and should appeal to people who are only interested in arcade games, as well as hardened adventurers. The game really is something new in the adventure world — it has lost the elements of drudgery that many arcadesters accuse adventure games of possessing. As such any Spectrum owner would be well advised to keep an eye out for this novel release. The plot and actual game is full of humour and it is a very relaxing way of passing time with your computer. Anyway, it's great fun to shout 'KWAH' when you're in a tight spot. I can't promise it'll turn you into a muscle rippling mega hero, but it should raise the odd eyebrow from anyone in ear shot. "

" The cartoon style graphics add tremendous atmosphere to Redhawk, and are very quick on the draw. Speed in adventure games is fairly rare, but Redhawk keeps the plot and action on the move by using key word entry from a menu on the bottom of the screen — a great aid to one-finger typists like me! Multiple commands can be entered, making the whole game less of the usual typing exercise. Interaction with other players is difficult at first but becomes easier with practice. Being in charge of a costumed superhero is quite a responsibility — but not one to be taken too seriously in this game. After all, he does wear his underpants over his trousers! Have some fun, go say "KWAH", wear the badge and have a go at being a superhero . . . "

" Being an arcade freak, I don't often get the chance to play adventure games let alone comment on them, so I was quite pleased when I found this one in my In Tray. It took me a good while to get the hang of Redhawk as it contains a lot of revolutionary ideas and new concepts in input and output. The game itself wasn't instantly playable but then again to me, most adventures aren't! After a few games, however, I'd really got into the spirit of Redhawk. The screen layout is very effective and the graphics used in the comic strip, although not fantastically exciting, are very well drawn and add excellence to an already good game. Issuing commands is fairly straightforward so it is never really a problem getting Kevin/Redhawk to do the things you want him to do. Generally I quite enjoyed playing Redhawk as it is good fun. I'm not sure quite how long I would play it — for me, as an arcade gamester, it wasn't all that compelling. "



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tures, is that although it's not an arcade game, all the action takes place in real time with the situation and characters constantly being updated as text is input by the user. With a set of cartoon frames running across the top, the screen action is shown in classic comic book style as Kevin/Redhawk obeys the player's commands. Each new command entered by the player affects the cartoon frame on the right of the screen, and the frames scroll to the left, making a mini cartoon strip which is continually added to as the game unfolds.

Interacting with other characters is fun, as speech bubbles superimpose themselves on the

Overall 91%

action frames and speech scrolls itself across. Using the SAY command opens a little cloud-like speech bubble above our hero and text pours out for the benefit of anyone on screen who may be in listening range. All the while a real time clock shows what the time is as the minutes to doom slowly tick away. A very competent attempt at multitasking.

Though wimpish, Kevin has access to enormous power at the mere whisper of 'KWAH'. That power is far from infinite, and there's a little meter there, on screen, to prove it. Such superhero activities as flying and fighting sap away the old super powers until — 'KWAH' — the poor chap is zapped back into his human form for a little rest and recuperation. The Superhero batteries are slowly recharged while Redhawk is in Kevin mode.

The main problem with the Kevin incarnation is his inability to move around easily — he has to rely on taxis and the train system. The **Daily News** is a bit of a tight outfit as no matter how many receipts Kev collects, Nigel Barlow, the mean Editor, won't give back any money on expenses: that really takes all the fun out of journalism. The only way to fund travel is to sell photos to the paper as the transport facilities cost a rather excessive pound a trip! As the player becomes acquainted with the local geography it's possible to save money by FLYing to destinations in caped crusader mode, but this uses up Super-energy.

B·B·B·BOUND TO BE A HIT..

"10 levels of fun make this torture excellent value for money. Nova rating. Definitely one of those 'just another go' games. Game of the month February" – Computer Gamer

"The most compulsive game I've ever played. If you don't buy it you'll never know what you've missed." says Gary Penn, Zzap! 64. Gold Medal Award. 97% overall.

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B·B·B·BOUNDER...

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ALIEN HIGHWAY

Producer: Vortex
Retail price: **£7.95**
Author: **Marc Haigh-Hutchinson**

Alien Highway was written 'by popular demand' as a sequel to *Highway Encounter* and is a souped up, modified version of the original game.

This time your target is the Alien Empire, a vast complex which is essential to the aliens' survival. Once again, you are in control of a droid, or Vorton, but this time there are no lives — a single robot is supplied and it has to be recharged from power points along the highway, as contact with the aliens or their weapons saps vital energy.

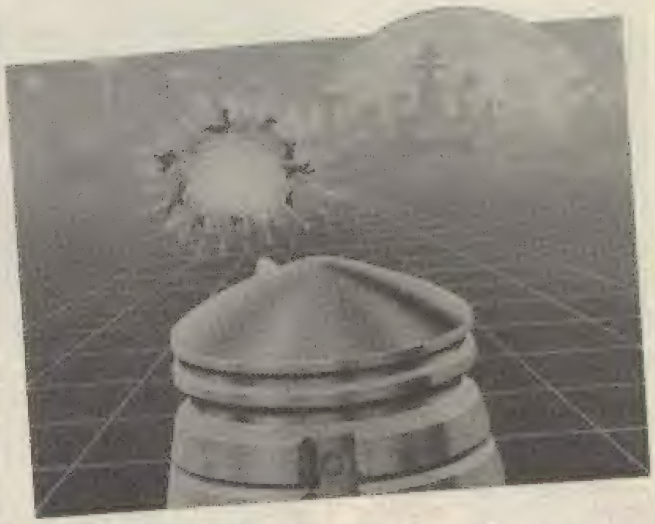
The ultimate aim of the game is to shove a mightily powerful explosive device — The Terratron — all the way down the highway to the gates of the Alien HQ where it can detonate and rid the world of nasties (until the next game, at least). The Vorton accelerates forwards at great speed but slows down quite slowly if left to its own devices, so some nifty control manipulating is called for to make it behave according to your wishes. As before, the Vorton has to be pointed in the right direction and then moved.

The Aliens have learnt their lesson from *Highway Encounter* — the road to the Empire is littered with obstacles and alien nasties. To add to the fun, the edges of the highway are electrified and burn a clumsy Vorton touching them to a frazzle. Once again, certain objects on the roadway can be moved by firing at them with your lasers and then used to block the path of some aliens, ensuring a safe passage for the Vorton and Terratron.

'Hairy lasers' are still fitted as standard equipment on Vortons, and make suitably short work of aliens. En route, the Terratron must be re-charged seven times so that it's in tip-top condition when it arrives at the Alien Empire: keep an eye out for the Regeneration Stations.

The status area at the bottom of the screen shows how low your energy levels are getting, the time that remains in which to complete the mission and how many of the seven re-generations your Terratron has been given. Without the full complement of regenerations the barrier guarding the alien complex is impassable.

The new highway spans thirty screens, as before, but this time there's a random element which governs the way the game sets up — map-makers won't have it all their own way!



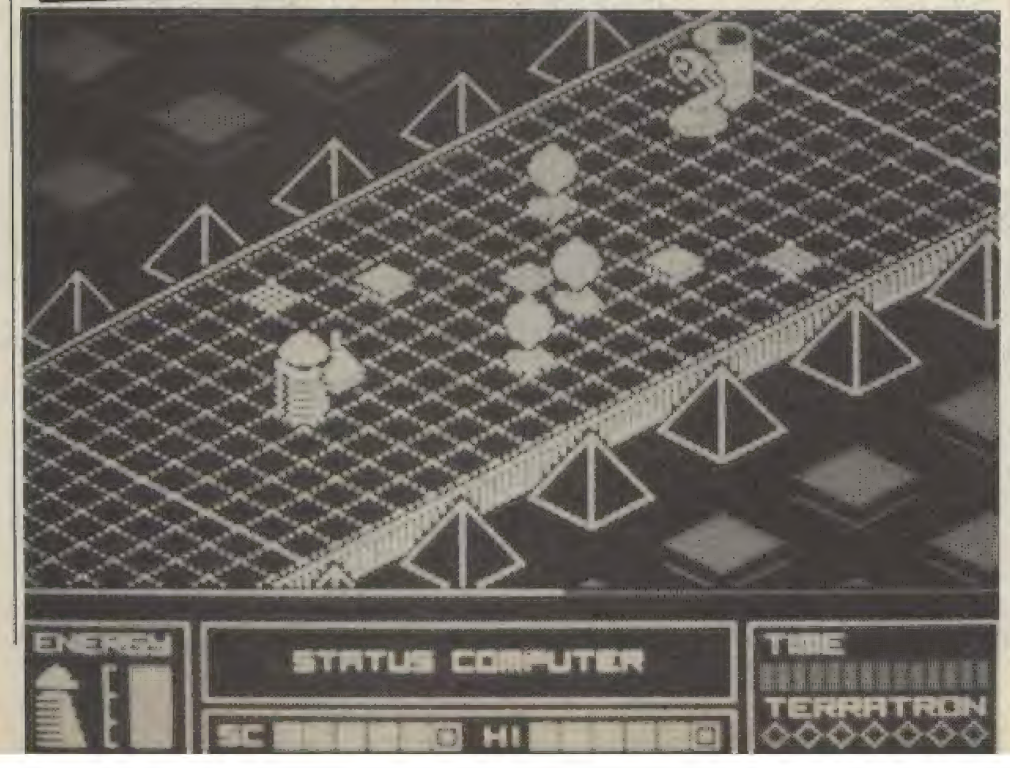
CRITICISM

●" **Yeah! This one is very nice; it forms a worthy successor to** Highway Encounter. **The graphics are excellent, and move beautifully smoothly.** Alien Highway **is a real pleasure to play; the level of difficulty has been pitched just right to make it frustrating, yet fabulously addictive. I can't really find much fault with it. A tune could have improved it a little, but the spot effects are satisfactory and the playability and addictiveness make up for any aural deficiency.** "

●" *Vortex's last release,* Highway Encounter, *was brilliant. Now the follow-up has arrived and can they keep up the standard? I'm glad to say they can. Although the game looks like its forerunner and is based on the same idea, I like it. Vortex have chucked in a new storyline and a few new sprites to contend with. You still have to advance up the highway, and the game is fun and challenging. Graphically, it is excellent with lots of nice touches like the shrinking aliens. Getting the hang of moving around can be a bit tricky at first, but after a few games you should find it easy enough to control your droid. Some people may say that* Alien Highway *is a bit too much of a copy of* Highway, *but as far as I'm concerned the game is ace, and fun to play.*

●" I was a great fan of *Highway Encounter.* This is basically the same game as its predecessor although there have been some great improvements made to the gameplay. Graphically there are a lot of similarities, but it's logical to use the same sort of Aliens I suppose. The characters are full of detail and well animated. While the backgrounds are not as varied as I would have liked, they are certainly well drawn. The sound effects are minimal: only the odd beep now and then when you lose a life or zap a nasty. If you liked *Highway Encounter* then you'll certainly like this — if you haven't seen *HE*, then I strongly recommend this game. The only problem that I can possibly forsee is that it might be a little easy. "

Trundle, trundle, trundle goes the Vorton. There's a nasty one-eyed monster lurking just down the road. Time to think about using the Hairy Lasers!



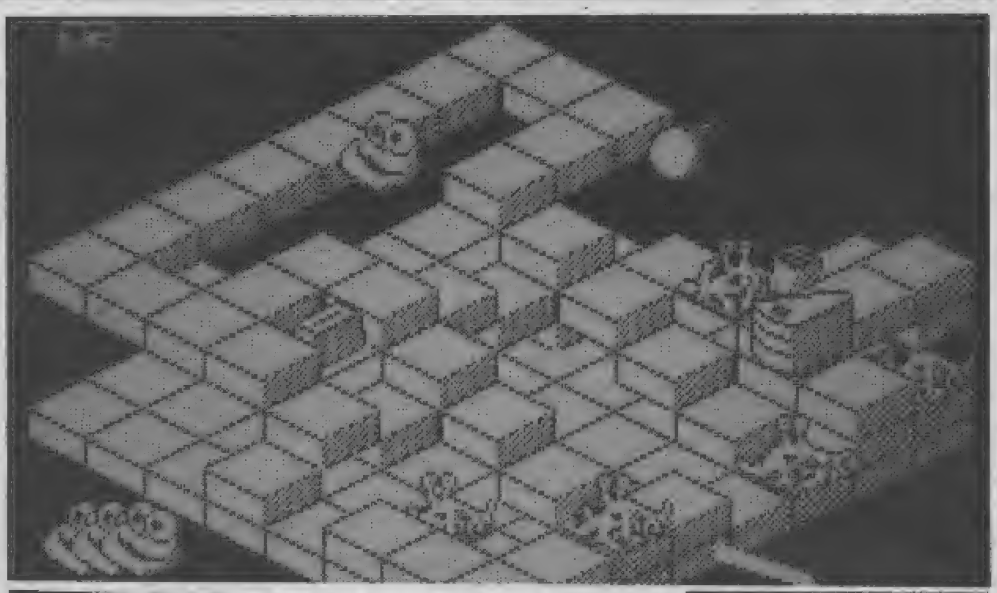
COMMENTS

Control keys: A decelerate, Q accelerate, K left, L right, SPACE/M/Z fire, P pause, G quit
Joystick: Kempston, Protek/AGF, Interface 2
Keyboard play: straightforward and responsive
Use of colour: sparse
Graphics: tidy and well animated
Sound: spot effects only
Skill levels: one
Screens: 30
General rating: Another one for *Highway Encounter* fans everywhere

Use of computer	89%
Graphics	87%
Playability	87%
Getting started	89%
Addictive qualities	89%
Value for money	88%
Overall	88%

KIREL

Producer: Addictive
Retail price: **£8.95**
Author: **Siegfried Kurtz**



Boing! The Bionic Battle Bun leaps through the air on the way to a bit of bomb disposal

Addictive Games are best known for simulation games such as the monster-selling *Football Manager*, but this new release shows the Bournemouth-based company taking a completely new direction.

Kirel features a cute frog-eyed character who hops around the seventy 3D screens that make up his world in search of bombs to defuse and objects to collect. Kirel can only climb one step at a time on a screen, so he must pick up and drop blocks as he goes along, building staircases and bridges as they are needed. You can only move to the next screen when all the bombs on the current level have been defused.

Each level has to be completed within a certain time-limit — the amount of time remaining is indicated by a fuse trailing from the floor, which smoulders quietly away. If Kirel doesn't move fast enough and runs out of time, the little marauding meringue explodes. Contact with patrolling monsters saps energy, and can also lead to death.

Once all the bombs on a screen have been defused by jumping on them, an exit icon shows pointing the way to get onto the next screen. If Kirel leaves the screen inside the time limit the score is increased.

The Bionic Battle Bun, as he is known to his friends in the patisserie business, roams around the screens searching for cakes to eat and arrow blocks to collect. Monsters are allergic to cake and are destroyed if Kirel touches one while he has a cake in his inventory. Arrow blocks give Kirel another section of bridge, while bags of sweeties and sugar replenish his energy levels. Little balls give Kirel more time to complete the current level.

Kirel has four lives per screen, and the status area on the bottom left-hand side of the screen shows the number of lives, cakes and bridge building units he has as well as his energy level.

Other useful items to keep your bulging eyes peeled for are cubes, which destroy immovable walls and pyramids, and transporter networks represented by shimmering curtains or circles, which can be used to move Kirel around the screen.

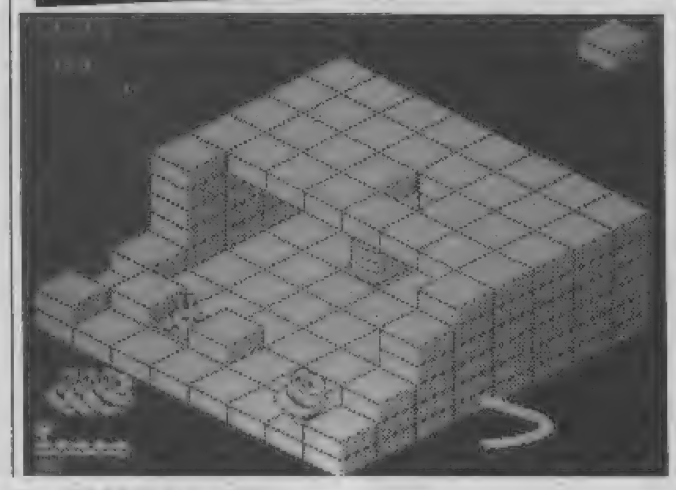
CRITICISM

"Well, well! Addictive have been relatively quiet since the golden oldie Football Manager, so it's nice to see them publishing such a fun puzzle game. More or less everything (except sound) has been exploited to the full to bring idea to fruition. The star of the game jerks a little bit, but other things make up for this. Generally the graphics are nicely represented, but the game's real high is its playability. I think it is really good, clean, puzzle solving fun. The title screen flickers a lot, but the effect is there, and it works quite well. Addictive and fun to play. Not worthy of a Smash, but well worth a good few day's attention."

● "Kirel *is definitely one of the most original games ideas around on the Spectrum at the moment, and contains some excellent 3D graphics. At first the gameplay is very slow, but I found it was relatively easy to get used to and suited the cute little character you control. The time bomb time limit is a very effective idea and makes you hurry around with more urgency than a counter would encourage. The graphics are set in great 3D perspective, although some situations seemed a little awkward to work out on the later levels. The other characters are well drawn and the baddies smoothly animated. The only thing I missed was a little tune to listen to, but that hardly counts against the game.* Kirel *is a brilliant game which anyone can get straight into playing. Definitely worth buying if you want something that is a little different from the 'run of the mill' Spectrum software.*"

● "I was initially very impressed, but after a few goes the novelty of the pretty graphics wore off and I was left with a fairly mediocre 'jumping around collecting things' game. The graphics are very good and the characters are well drawn, although a little jerky when they move. The sound is limited but adequate I suppose. Controlling your blob or whatever it is, is difficult at first but after a few practice games it becomes second nature. It took me a long time to get into, but once you I got on with it, I found it fairly playable and addictive, although it isn't the sort of game I'd get hooked on. Not a bad game — it'll take a lot of determination to complete."

Kirel's holding a block, as you can tell by the icon in the top right of the screen. Where's he going to put it down? Time's running out...

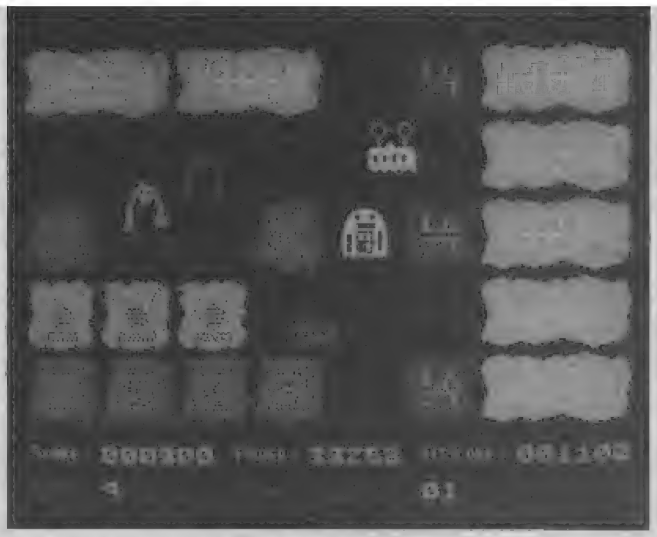


COMMENTS

Control keys: 0 pick up/put down, 1 rotate right, 2 turn round, 3 rotate left, SPACE to pause, ENTER to continue, B build bridge, E up, S to play game, T to play training game, VT abort game
Joystick: Kempston, Cursor, Interface 2
Keyboard play: no problems
Use of colour: monochromatic screens
Graphics: very neat 3D platforms
Sound: spot effects only
Skill levels: two modes, training and play
Screens: 70
General rating: A neat arcade/puzzle game that's quite compelling

Use of computer	83%
Graphics	86%
Playability	85%
Getting started	84%
Addictive qualities	87%
Value for money	83%
Overall	85%

JOCK AND THE TIME RINGS



Producer: Atlantis
Retail price: **£1.99**

Jock, who bears an uncanny resemblance to Dusty Bin, is stuck in the wrong time zone. You must help him return to his own time by collecting 32 time rings from each of the three time zones he visits.

Before you can enter a new time zone you must give the correct password and this is only given to you once the 32 rings from the previous time zone have been collected. Naturally this doesn't apply to the first zone or else you'd never get started.

Each zone has a maze protecting the time ring and Jock has to find his way around these mazes trying to collect the rings. He can move upwards, downwards, left and right. He also possesses something called a speed booster. This enables Jock to put on an extra spurt of speed to escape from the Time Guardian, but the power which he is given at the beginning of the game and which depletes gradually as he moves around, goes down a lot quicker when Jock is using his speed booster. However, Jock's power pack is regenerated at the beginning of each time zone.

Jock is not the only one interested in the time rings. They are also possessively guarded by the Guardian of the Rings who buzzes around the mazes in a variety of colourful disguises blocking the route to the rings. Any contact with the Guardian spells instant death for Jock. Well, actually it isn't instant as such because Jock is provided with nine lives at the start of the game. He loses a life every time he brushes against the various Guardians but he gains a life for every five rings he manages to collect. To make matters worse Jock only has a certain amount of time in which to gain possession of a ring because they become unstable in his presence. If he takes too long to get around a maze then the radiation level in the ring becomes lethal and he loses a life.

You can keep a check on Jock's progress by looking at the chart at the bottom of your screen. This shows how much energy Jock has left in his power pack. It also shows how many lives he has remaining and how many rings have been collected. You can also check the score: Points are scored for each ring collected depending on its colour. Extra points are scored for how much power Jock has left at the end of a zone.

Once Jock has negotiated his way around one time zone and collected 32 rings from it then he can move on to the next one. A password is flashed up onto the screen which gives you access to the next part of the game.

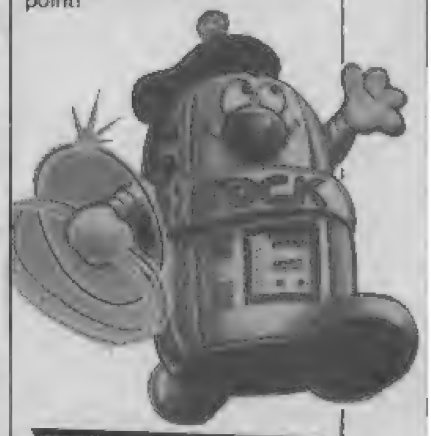
The game ends when Jock has completed all three time zones and collected the required number of time rings. It is then possible for him to return to his own time of 2112 AD, no doubt for a refreshing game of the same name!

CRITICISM

● **" Not the usual type of jolly Atlantis software this, it would be quite easy to complete if you had a couple of hours spare and a lot of patience, but to tell you the truth I couldn't stand this one for more than twenty five minutes. The graphics are large but undetailed and quite messy. There are next to no sound effects, the most you can hope for during the game itself is a beep every minute when there is a ring in your room or an elongated burp when you lose a life. The one thing that pulls this game way down below average is it's speed, it is so slow as to be monotonous from the start. Even for its cheapo price tag I wouldn't recommend this game as it is BORING. "**

● *" This game would just about be passable if it were played at high speed. Unfortunately it plays ever so slowly and consequently becomes a real bore after the first one or two games. The graphics are big but unimaginative and lack any detail and the sound boils down to a few burps. There are plenty of locations but they all look very similar and it takes an eternity to slowly trundle round them all. The fact that it sells at two quid doesn't make it worth buying — there are a lot of better programs available at the same price. "*

● " Another funny title for a budget game, but I'm afraid there isn't much in *Jock and the Time Rings* that hasn't appeared in any other budget game. It's very slow to play, even when you're moving in 'fast' mode. The characters tend to be too big to do anything detailed or accurate with, and the control is very heavy-handed, only permitting four-directional movement. This is a below average game. Jock looks as if he is a reject from *One Man and his Droid*, and the passages and the codes required for the next stage remind me of that game. I couldn't find anything special in it apart from the nice character set perhaps — but that's hardly a great selling point! "



COMMENTS

Control keys: definable
Joystick: none
Keyboard play: reasonable
Use of colour: average
Graphics: big, fat and jolly
Sound: crummy
Skill levels: one
Screens: three time zones with 31 rooms in each
General rating: a very boring and slow collect em up.

Use of computer	59%
Graphics	38%
Playability	31%
Getting started	56%
Addictive qualities	32%
Value for money	35%
Overall	32%

V

Producer: Ocean
Retail price: **£7.95**
Author: **Kaos**

A race of reptilian aliens — the Visitors — threatens to take over the world. A resistance movement has been formed to try to prevent this, which is where you come in: playing Michael Donavan, fearless leader of the resistance movement who aims to destroy the aliens single handed.

Having sneaked aboard the Visitor's Mothership he scuttles round, planting bombs in key locations. However, Diana — leader of the alien horde — has spotted your presence and is doing her best to make sure you don't succeed. Devilish Diana has commanded her army of robots to search you out and put a stop to your plan.

Four types of robots have to be dealt with. Surveillance robots follow Donavan around the ship reporting back to Diana. Maintenance robots scuttle along the floor of the space craft fixing things while cleaner robots hover at head height tidying up. But it's the deadly security robots that Michael Donavan must really keep his eyes peeled for. They can be destroyed with a bolt from the laser gun, and points are won for obliterating them, but ammunition is severely limited.

The robots operate on high voltage electricity and contact with them gives Donavan a nasty shock. Encounters with robots don't kill instantly, but they do put a strain on the heart. After too many collisions with robots, your heart gives out.

Windows at the bottom of the screen monitor progress. A green screen to the left shows messages being sent to the robots from Diana and helps you keep track of the robotic hotspots. The middle screen includes a clock and under this the score is displayed. A lightning bolt reveals the laser's firepower and a cardiogram bleeps reassuringly at the start of the game, getting more irregular as Michael's heart is damaged.

Function keys are located on the right of the status area. From the top and moving clockwise the keys are as follows: a) allows the game to be paused or abandoned; b) calls up information on locations in the ship; c) allows you to lay your explosives; d) is the log-off button, used to return to the game; e) displays the security code in the green window while f) stores information about the red-dust formula that Earth has been developing to kill off the aliens.

Number keys to the right of the function keys, like all the numbers in the game, are in base six because the reptilian aliens only have six fingers!

Every now and then the hero comes up against impenetrable security doors that can only be opened by inserting the correct code. However, he can move from level to level via teleport pads. To use these, stand him on one and press up to move up a level, or down to move down a level.

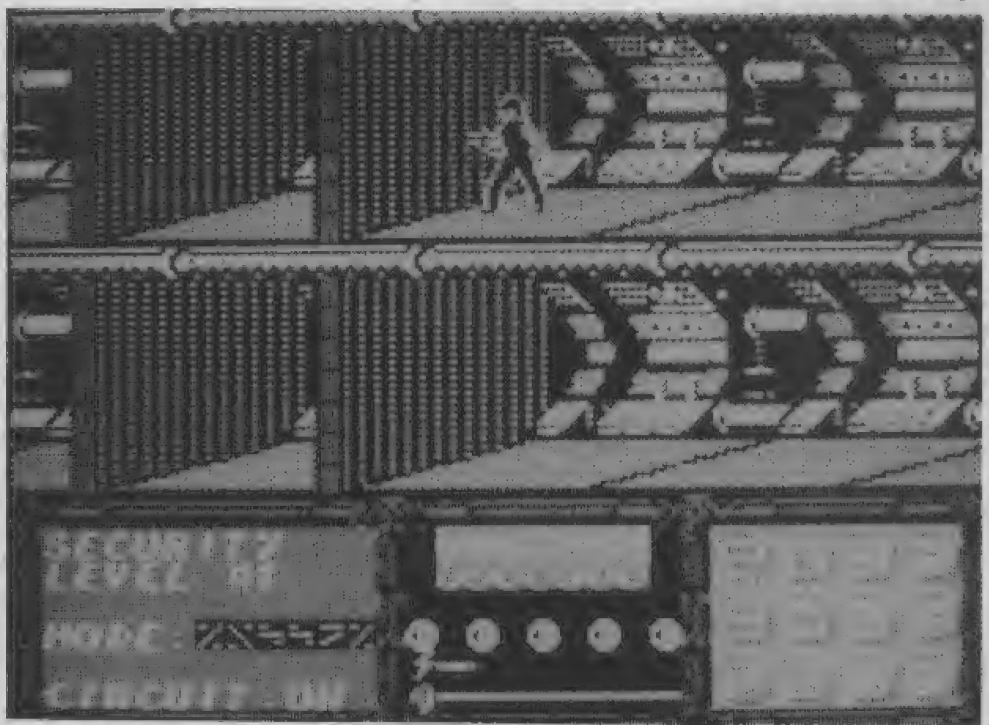
Will Michael Donavan manage to outwit the alien invaders, or will we have to sit through another series of *V* on the television to see if good triumphs over evil?

CRITICISM

● **" V has finally arrived and after all the hype the game hasn't turned out to be too bad. The alien's mother ship is a pretty drab place apart from the odd console room here and there, and a few laboratories if you can find them. I was very disappointed to find that there were lots of enemies on the ship but none of them were Visitors: instead there are these pesky little robots that literally get under your feet and don't engage in proper combat at all. The finish of the game is very good and you'll spend a long time on it if you play it fully. Unfortunately the writer(s) seem to have left out the TV tie-in, and thought up a game all of their own. Not so much for fans of the telly series as for serious arcade/adventure players. "**

● *" I'm not incredibly enthralled by V. The game has its good points, admittedly. The animation for Donavan's forward rolls is quite neat, but the backgrounds make the robots hard to see, and generally make the game look a bit of a mess. Once you get into V, it's fun to play, and it gets better the longer you spend with it. I'm not sure that I'd come back to it a lot, but I played it for quite a while. Overall, not bad, but it could have been improved. "*

● " Controlling your man is not hard, but at first it is a little confusing. The icons are also quite easy to use after a bit of practice. The graphics are disappointing: there's a lot of colour clash and very little variety in the backgrounds. Your character is well animated, although sometimes it's hard to make him out against the garish backgrounds. The sound is minimal, with only a few spot effects. Generally this follows the trend of most Games-of-the-series in that it's disappointing. "



Looks like Donavan has got a slightly impassable problem on his hands on the top deck of the Alien Mothership

COMMENTS

Control keys: CAPS SHIFT left, X right, B to SPACE fire, P up, L down
Joystick: Kempston, Cursor, Interface2
Keyboard play: fine
Use of colour: effectively monochrome
Graphics: neat animation and smooth scrolling
Sound: continual noise
Skill levels: one
Screens: large scrolling playing area
General rating: A neat arcade adventure, but where are The Visitors?

Use of computer	73%
Graphics	71%
Playability	68%
Getting started	72%
Addictive qualities	72%
Value for money	67%
Overall	**70%**

QUAZATRON

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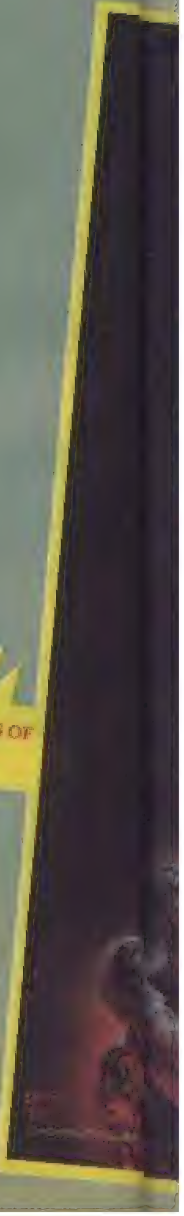

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SPIKY HAROLD

Producer: Firebird
Retail price: **£1.99**
Author: **Andrew Rogers**

Harold is a spiky and fat hedgehog and his ambition is to get even fatter. Fifty two bits of grub are scattered, one per screen, throughout Harold's homeland. In twenty four hours from now winter is set to begin with a very severe frost, and it'll be time for a quick quarter of a year hibernation to put the little spikoid in shape for the coming year.

Having Harold retire into his pile of leaves without the appropriate layers of fat means the poor little creature is bound to freeze to death around Christmas time. It's up to all you joystick wagglers out there to get Harold's stomach packed with goodies from the surrounding countryside so he can survive the winter.

Ol' Spiky is a rather special hedgepig, as unlike all his relations, this young hedgehog has decided that the best mode of travel for him is waddling around on his hind legs. The player controls Harold's wobbly progress with the use of left and right, and as an extension to Harold's lurch there's also a jump key available that conveys a little boost into the air.

Harold's home territory is split into fifty two screens, and as the spikelette wanders out of view another screen flicks up. Apart from the scrummy morsel waiting to be collected, each screen contains a number of nasty hazards that remove one of Harold's nineteen lives on contact. They take the form of various foes including dripping acid, psycho snails, marauding birds and other anti—hedgehog personages.

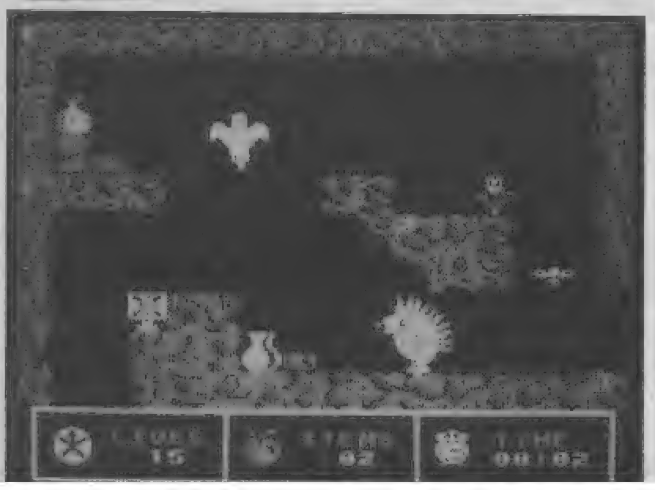
Most of the action is set underneath beautiful rolling countryside. Since few hogs dare venture down here that's why all the food is still uneaten in the rush to hibernation time! Along with the food there are coins which add an extra life on collection and the odd glass of wine that'll make Harold a slight bit tiddly. Well he's only a small woodland animal and it doesn't take much to get him drunk . . . all the controls are temporarily reversed after he's quaffed a glass of vino.

So there it is: ignore Harold's plight and it's all too likely that you'll have the death of cute and cuddly (if you don't mind the odd prickle or two) woodland creature on your conscience. Is this something you can live with?

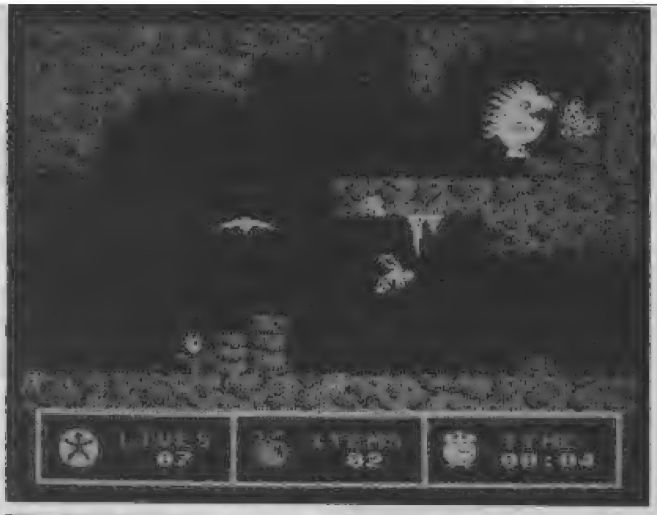
CRITICISM

● **" Alright! This guy could be a real cool dude, with his smooth walk and ZZAP! reviewer style haircut! Unfortunately, his would-be characteristics haven't been fully exploited in the game, and it doesn't take long for it to become boring as you trace the same course time after time. Nineteen lives, even though they're all needed, is a bit of a silly idea as well. Other ideas that can be seen to have been attempted are quite neat, but as is the case so often, they just haven't worked. For £1.99, Harold and his spikes may provide an hour's entertainment, but after that, it would be destined for my 'budget bin' — the disposal unit feared by all cheapies! "**

● " Spiky Harold *is a playable and colourful game. The graphics are not the best I've seen in a cheapo game but they're adequate and the animation of your jolly character is very good. The screens aren't very detailed and there is never much brain ache in getting the pieces of food. After a couple of hours play I had just about lost interest as it is very infuriating when you have to go through the same screens every game to get anywhere. The sound is about average for this type of game, a whirring that vaguely resembles 'The Flight of the Bumble Bee' noise and a beep or two when you die. Not a brilliant game this, but quite good fun for a rainy afternoon. "*



HIC! Harold staggers a bit after slurping a glass of wine in the screen to the right. Can he time his jumps just right to get that tasty veggie?



Jaws agape, the greedy Harold in Liddon Emulation Mode is just about to feed his face on a tasty morsel of grub, having got past the bee and bat

● "Fat, wobbly and spiky, isn't there a magazine editor who looks like that? *Spiky Harold* is something of a neato budget game that for some very mysterious reason is quite compelling to play. It's not anything instantly definable: it's certainly not the graphics or sound as they barely rate above average. Despite constant deaths, I just keep having another go. Making Harold jump, wobble and scoff (*just like a certain reviewer* — Ed) may seem a bit limited and even potentially boring but *Spiky Harold* is worth having a look at, and well worth buying if it grabs you the way it did me. "

COMMENTS

Control keys: redefinable
Joystick: Kempston
Keyboard play: fine
Use of colour: average
Graphics: also average
Sound: nice spot effects, but no tune
Skill levels: one
Screens: 52
General rating: Quite a fun game, for a while at least . . .

Use of computer	59%
Graphics	62%
Playability	66%
Getting started	67%
Addictive qualities	64%
Value for money	70%
Overall	65%

THE COMET GAME

Producer: Firebird
Retail price: **£7.95**
Author: **Andrew Glaister**

Halley's Comet is speeding towards mother Earth carrying lethal bacteria capable of wiping out all forms of life, according to the inlay. The game is obviously set in seventy six years time when Halley's Comet makes its next visit, because a highly advanced space ship has been dispatched to destroy the deadly germs that live on it. (The game turned up long after the real comet had been and gone!) The screen shows a view through the cockpit window of the shuttle with the comet shimmering in the distance and the stars scrolling towards the ship.

To begin with you assume the personality of the ship's onboard computer and have to deal with problems during the voyage — the trip is far from uneventful.

Every so often one of the five icons on the main viewscreen flashes to indicate that a problem has just arisen. Each icon leads into a subgame, played against the clock, in which the fault or threat has to be dealt with if the main mission is to continue. Meteor showers have a habit of knocking the antenna out of line from time to time, and it has to be adjusted until the maximum signal strength is regained.

Drifting off course sets off a defence system which releases homing missiles targetted on

your ship. A *Missile Command* type sequence then follows, and the aim is to limit the number of missiles that hit the ship, which changes colour from white through to blue before exploding when the shields give way.

Coffee supplies must be kept high — vital for the pilot's reactions. A flashing coffee jug icon leads to a screenful of icons which control the whole coffee making process. By moving the cursor around and selecting icons, the coffee system has to be kept in equilibrium, including the pilot's bladder, which has to be emptied with the 'P' icon lest it explode!

Now and again, rampant germs gain access to the ventilation system of the craft and have to be eliminated in another arcade sequence in which a moving cursor is used to release spiralling germ killers. Finally, a logic problem has a habit of cropping up in a section of circuitry, and it has to be sorted out by providing the appropriate inputs to light up a set of LEDs

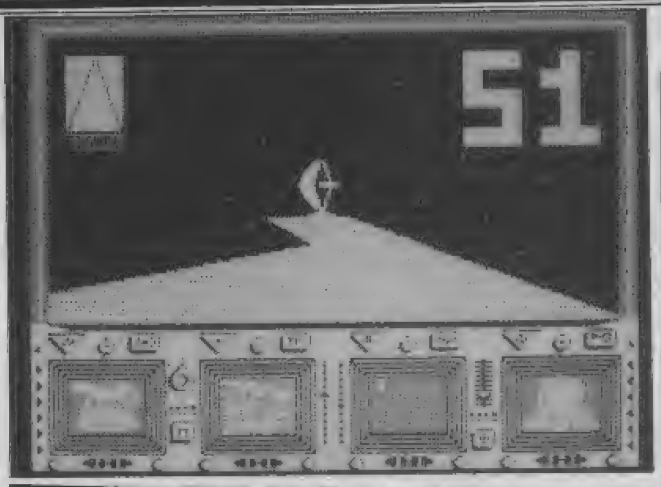
The little sub games cycle round at random during the journey to the comet, and if you manage to survive them all it's time to get on with the main purpose of the mission: eradicating the germbags that live on the surface of the comet. Destroy them all, and you can return to Earth a superhero and saviour of the human race. Take too many hits from the bugs, and it's game over.

CRITICISM

● **" Thinking of a proper game based on the visit of Halley's Comet must have been a pretty hard task, so Firebird must have decided to get a load of little games together and think of a common element. They failed. The Comet Game is an excellently finished game, but it suffers from lots of things that aren't well explained, such as the antenna alignment — you have to press fire on completion, else you just blow up! Firebird have probably made the best they could have of the astronomical phenomenon, but this game is too bitty and would probably be too hard for most people to enjoy. "**

● *" Um. Halleys Comet is an excellent feature around which to base a game, but could someone tell Firebird that to sell lots and lots of copies of a game, and to get high placings in charts and things, you need a good game! The line drawing routines put Andrew Glaister's trademark on the game, but the repetitive sub-games get very boring after a while. I can see that the author has tried to make the game a good one, and I have to give him credit for that, but unfortunately it just doesn't seem to have worked out. When you have to start doing the same thing over and over again, it gets more and more tedious and I got very bored of it. "*

● " Grr! The on screen presentation is very neat, but I was ready to throw a brick at the telly when it kept flashing 'YOU LOST' on the screen. Each of the little games contained in the scenario is passably entertaining, but no great shakes, and by the time you've played them over and over and have still got more to survive before getting to the comet itself, annoyance sets in. When you do finally make the comet, the final sequence really doesn't justify all the effort expended getting there. Sorry Firebird, this game is more Lukewarm that Hot. "



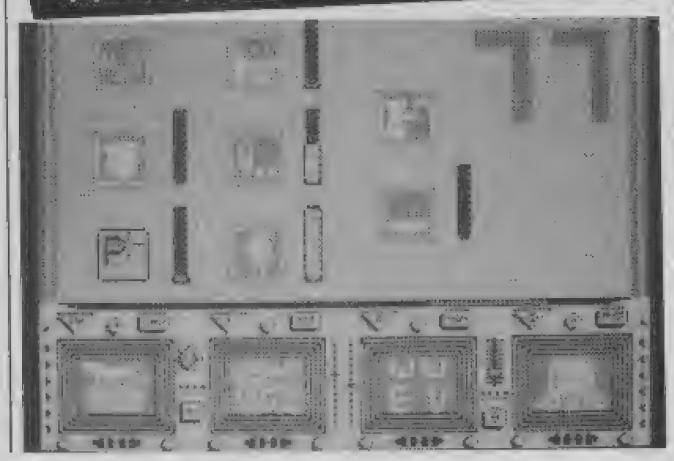
Aligning the antenna so that it receives the maximum signal, as indicated in the little panel on the left. Don't forget to press fire when you're happy with its position

COMMENTS

Control keys: redefinable
Joystick: Kempston
Keyboard play: a bit slow to respond, maybe
Use of colour: restrained
Graphics: neat wire frame routines
Sound: raspy spot effect
Skill levels: one
Screens: six
General rating: Effectively a compilation of little budget games

Use of computer	69%
Graphics	71%
Playability	57%
Getting started	66%
Addictive qualities	57%
Value for money	55%
Overall	58%

The coffee making screen, in which the mechanical equipment has to be kept topped up and the human equipment emptied out!



CORE

Producer: A & F Software
Retail price: **£9.95**
Author: **the A'n'F team**

The people living in the Federation's asteroid mine colonies are being wiped out for no apparent reason. Alien interference is suspected and Andrew Angello, explorer extraordinaire, has been drafted in to deal with the problem.

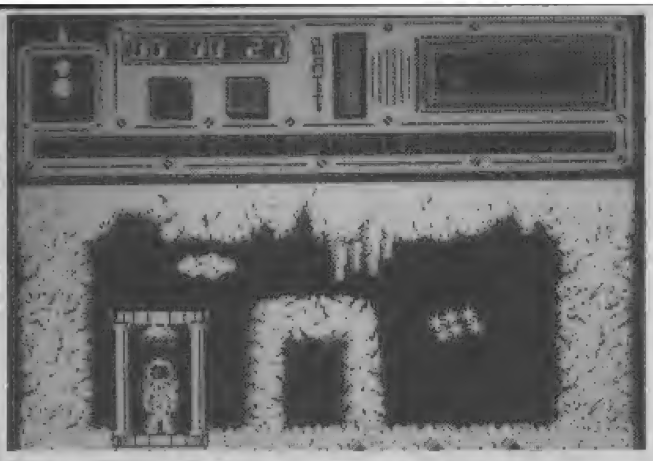
Andy travels to Eroc 1 to find that no-one is left alive. The only way to solve the mystery is to locate the bio-memory segments of the main computer, hidden deep within the mine workings on the asteroid. Once these have been located, the Federation can examine their contents and use the information they hold to combat the alien murderers.

The screen gives a side-on view of tunnels on Eroc 1. Dangerous alien machinery lies around the mines, so beware of anything that moves or looks nasty — contact with it drains energy from the battery pack powering Andy's protective suit.

Each of the four mine levels contains over 250 cells which Andrew has to investigate — linked by the flip-screen method favoured by arcade adventure writers. Anti-gravity lifts allow travel between segments of a level, while automatic teleports link levels. Standing in a teleport for three seconds causes Andrew to disintegrate and rematerialise on another level. Every time Andrew uses an anti-gravity lift or teleport, or is zapped by a nasty, his battery pack loses a little power. As the battery powering Andrew's suit runs down, the screen changes colour from white, through yellow, red, mauve and finally blue. Death follows if the protective suit runs out of power.

A status panel reveals Andy's progress. One display shows the exits from the current cell; a clock ticks out the time expended on the mission and a meter shows the amount of charge remaining in the suit battery. An icon-driven menu allows the game position to be saved, once a cassette has been found in the mines, and the game computer can be asked for help. The game may be paused and a saved position loaded in.

Andy has to find tools and other useful objects in order to complete his mission. A slight oversight on the part of the Federation means that the intrepid explorer embarks on his adventure without a map. First priority must be to make one...



Our superhero materialises in a teleporter while two mobile nasties — a starburst and electro cloud hover in wait for him. Cameron's got his own personal dark cloud that follows him round on Monday mornings!

CRITICISM

● "At first glance I found Core to be very similar graphically to Alphabatim's Robot Messiah — but without colour clash. The man is very easy to control, but he seems to move two characters along when he turns which is a bit of a pain when trying to run away from the baddies. The whole idea of the game is very similar to an Everyone's A Wally in space, but with scenery that's rather 'samey'. The animation is very smooth and the graphics are pleasing to look at, but apart from that I found Core to be a very large but rather boring copy of all the good arcade/adventures."

● "Core *has got a reasonable scenario, but the game itself is a bit lacking in content. The game is technically above average, with a very large area to explore; it has got good graphics, but colour and sound are both average. I found it quite difficult to get to grips with the game and make any big advances. With the exception of* Chuckie Egg II, *A&F have been quiet for a while, and I can't believe that they've spent all that time just developing this. For ten quid, it's not one I'd hastily recommend to everyone I meet, but mapping freaks might find it a challenge to their abilities as it is pretty big, but it isn't mega-good . . .*"

● "I don't really know what to make of this one. At first sight it seems to be very good, but after a few goes it becomes obvious that you should be able to do more than just potter around a stack of screens. A quick reread of the instruction booklet uncovered the Icons, but not how to use or access them. I really did try to get on with them, but after a few more goes I'd given up trying to make the icons work for me. Graphically this game is excellent, the characters are well drawn and animated and the backgrounds add a nice touch too. My only gripe is that there could have been a little more colour. The sound is poor: there is no tune, and very few spot effects during the game. Although I can appreciate the nicer points of this game, I couldn't really get into it."

COMMENTS

Control keys: redefinable
Joystick: Kempston, Interface 2
Keyboard play: no problems
Use of colour: monochromatic play area hence no clashes
Graphics: quite neat but samey; nice animation on the figure
Sound: spot effects
Skill levels: one
Screens: 1,023
General rating: A large, but somehow uninspiring arcade adventure

Use of computer	73%
Graphics	76%
Playability	64%
Getting started	68%
Addictive qualities	67%
Value for money	65%
Overall	68%

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Dominic

Good news! — we got the Mosaic account. They're the software people who did Erik the Viking and Adrian Mole. Apparently in the autumn they're launching a Mole follow-up (the first one's sold over 100,000 copies to date) and a game based on The Archers.

Meanwhile, we need to rush out an ad about their new game which launches in May. It's based on The Snow Queen, that rather sinister Hans Andersen tale about the little lad with the shard of evil mirror in his heart.

It's an illustrated text adventure (whatever that is) and the player has to help this girl Gerda rescue the boy. But — here's the tricky bit — she's not easy to advise because she's only young and sometimes gets the fluffy end of the stick. Tricksee, eh?

The 'program' (programmer?) has been written by St Bride's, a distinctly eccentric bunch of people in Ireland who have a reputation for producing rather intriguing software stuff and also run a sort of take boarding school.

Evidently they're literate, which I gather is quite a plus in this field.

Anyway, could you throw together some concepts while I'm in Cannes? Art Department are looking out some whizzy airbrushed robot pics, so basically once you've knocked the foregoing into 30 or 40 compelling words we're in business.

Ciao —

Olly

FIRST, IDENTIFY THE KEY ADVERTISING MESSAGES...

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SUPERBOWL

Producer: Ocean
Retail price: **£9.95**
Author: **Kaos**

Superbowl from **Ocean** is a two player simulation of the supreme American Football match which pits the Chicago Bears against the Patriots. Those of you who stayed up all night to watch the entire match live on TV know that the Bears stormed home this year to a resounding victory.

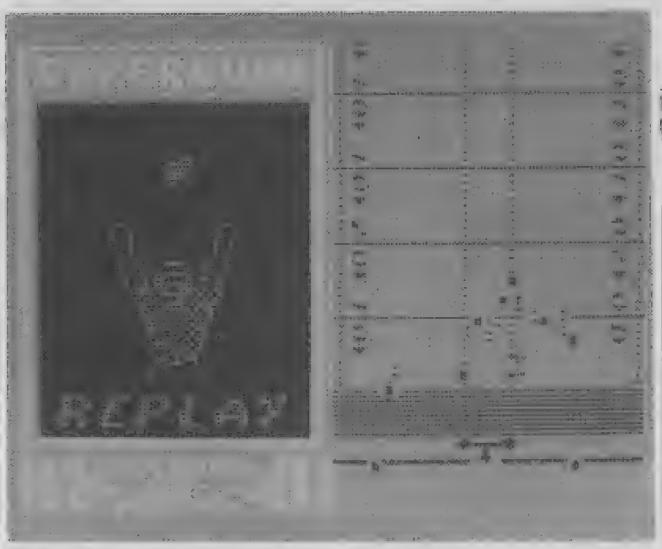
Superbowl can only be played properly by two human players, although one person can practice moves and tactics by controlling both teams.

The game comes in a two cassette pack with a fifteen minute audio cassette which gives a brief history of American Football and provides a quick resumé of the rules. It also reassuringly points out the obvious similarities between American Football and Rugby Football, in case you go completely to pieces.

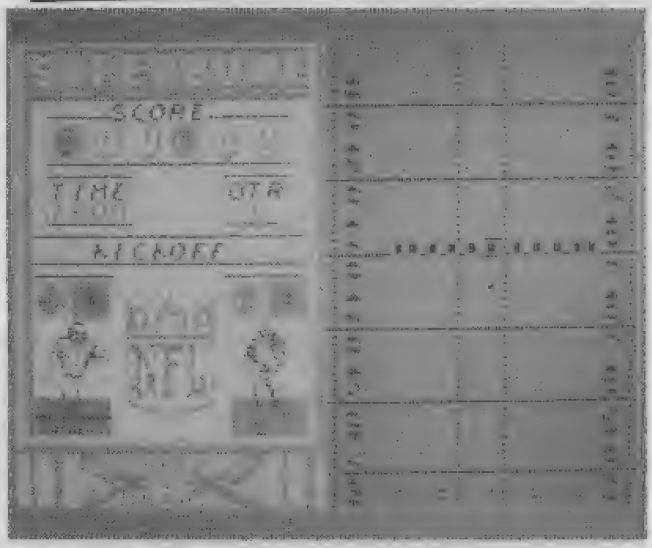
During play, the screen is split vertically into two main areas. The section on the right shows the pitch and the players marked out in their respective playing positions while the left hand area is used for the menus that to control the game's progress. A check can be kept on how much time has elapsed since the beginning of play, and two 'video' screens give action replays and close-ups on particular players, just like they do on the telly!

An elaborate menu system controls all the action. Whoever is playing on the offensive side must sort out their tactics before the game can begin. The first menu shows the types of passes that can be used: long pass, short pass, rush play, and special play (which has its own little sub-menu). After the type of pass has been selected for your player to make, a further menu pops on screen and it's time to choose which player you want to control during the next section of play and what the rest of the team is going to get up to. Using a similar menu system, the other team's defensive strategy can then be set up — 3-4-4 or 4-3-4 are probably the safest to go for when playing the game for the first few times. Finally the marking scheme has to be sorted out and then the play can be made.

Hitting fire causes the players to make their moves, and the right hand display follows the action. The general idea is to move the player in possession away from the other players as rapidly as possible before the inevitable rib-crunching tackle. Once each section of the game has been completed you may be treated to an action replay, showing in slow motion on the video screen exactly what happened to your team during the previous bit of play.



The replay sequence in full flow during SUPERBOWL, the American Football simulation to end all American Football simulations according our our AM Footie Freak, Dominic



The kickoff screen, with everything set up for the next move. The game was too difficult for our Cameron to get to grips with though (Tee Hee)

CRITICISM

●" Superbowl **is by far the best American Football game on the Spectrum. Ocean seem to have brought the exciting part of American Football to the fore — the man Vs man action. Other efforts on the Spectrum lost most of the atmosphere as they concentrated too much on the theory of the game — although the Argus** American Football **was a very good manager's eye view simulation. The graphics of** Superbowl **are very well done and routines for the replays are excellent. The game's market, I feel, is definitely limited, mainly because it's an American Football game but also because it is a two player only game.** Superbowl **missed out on all the hype before Superbowl XX and may well lose sales because of its late arrival. If you love this great American sport, then get the popcorn out, invite a few friends round and knuckle down to this very playable, superbly finished Superbowl bonanza. The audio tape that comes with it is most helpful, and a great touch. "**

●" *I'm not the world's greatest American Football fan, but I sometimes watch Channel 4 coverage, and enjoy it, so* Superbowl *is quite nice to play. Despite the extensive instructions and accompanying cassette, I found it pretty hard to get into, but once I started to understand it more, well, look out Bears, here I come! Seriously though, it is a very nice game to play, and the graphics, while not revolutionary, are attractive. The replay feature really adds to the game. Everything is as it should be and I think that Ocean have pushed the American Football theme to the limit by producing as realistic a simulation as is possible on the Spectrum. I like it. "*

●" A very neat simulation indeed from the Ocean stable — it's just a pity that you have to play it with a friend to have much fun. The graphics are neat, the control system fairly easy to use once you get the hang of the game actually being played out on screen and all in, this game should find a place in any sports simulation collection. I liked it, but American Football fans will really appreciate *Superbowl. "*

COMMENTS

Control keys: Player 1: Q right, 1 left, CAPS SHIFT down, A up, S fire; Player 2 ENTER right, SPACE left, P down, 0 up, O fire
Joystick: Kempston, Interface 2
Keyboard play: fine
Use of colour: attractive
Graphics: slick, especially on the Action Replay
Sound: not a lot
Skill levels: one
Screens: one main viewscreen
General rating: An excellent simulation that should be very well received by American Football fans but may not be that appealing to the general gameplayer

Use of computer	87%
Graphics	86%
Playability	79%
Getting started	79%
Addictive qualities	87%
Value for money	89%
Overall	85%

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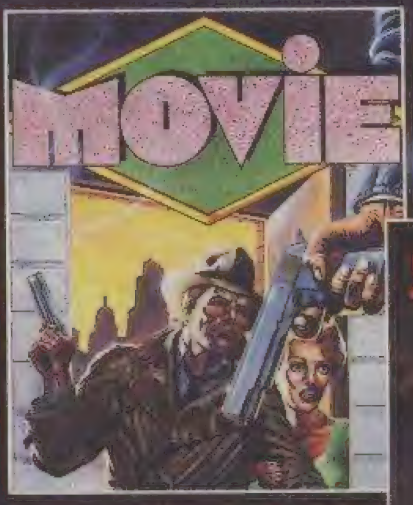

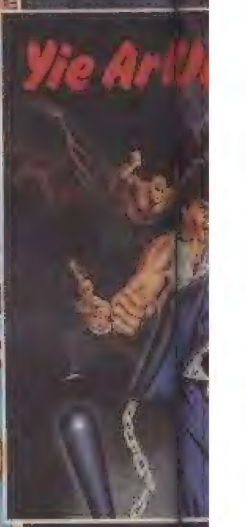

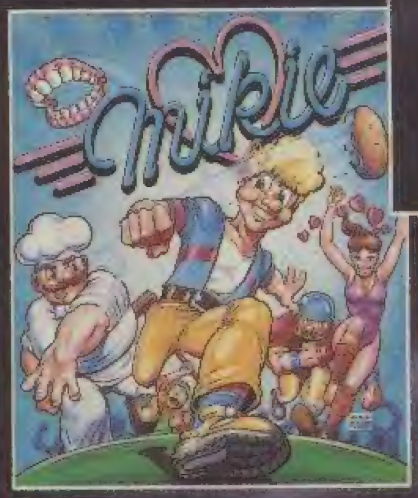

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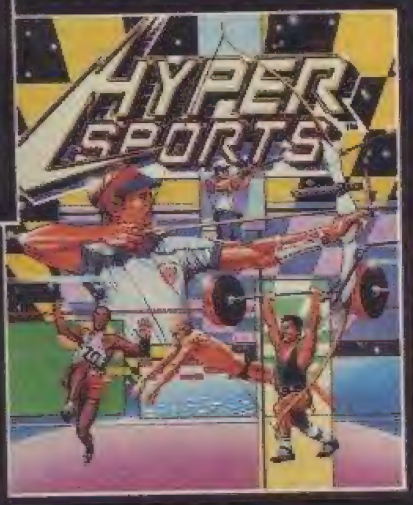


CADE
OI
OTS

PING PONG

You can almost feel the tension of the big match breaking through the screen...the expectant crowd is almost on top of you! You return the service with a top spin backhand, then a forward back-spin, the ball bounces high from your opponent's looping, defensive lob...SMASH!...a great shot opens the score...but this is only your first point! Play head to head or against the computer in this, Konami's first and best table-tennis simulation.

HYPER SPORTS

Enter the stadium of Konami's No. 1 arcade smash-hit sports simulation. From the finesse and skill of Archery and Skeet Shooting to the critical timing and brute force of weight lifting – six events to test you to your limit. Hyper Sports – continuing the challenge where 'Track and Field' left off.

only **7·95** each

Imagine Software is available from selected branches of:

Boots, WHSMITH, John Menzies, WOOLWORTH, LASKYS, Rumbelows, Greens, Spectrum Shops and all good dealers.

THE POWER OF MYSTICAL SUBSCRIBER NUMBER

Thrill to the Positive Waves created by its power

At last, after a short period of dormancy, the power of the MYSTICAL SUBSCRIBER NUMBER has been invoked as a result of strange rune-casting rites known and performed by a select band of Ludlow initiates.

People who already own a MYSTICAL SUBSCRIBER NUMBER should find a host of goodies accompanying their copy of this issue of CRASH — including a GIANT A2 size STARSTRIKE II poster from Realtime, a special newsletter doobrie produced exclusively for owners of the MYSTICAL SUBSCRIBER NUMBER Talisman, containing details of money saving offers, and a full colour A4 QUAZATRON poster from Hewsons.

A tiny peek inside the top secret MYSTICAL SUBSCRIBER NUMBER newsheet reveals that owners of one of Guru Denise's numerical lucky charms will be able to save £2.00 on a copy of STARSTRIKE II if they complete a special HOLY TEAR OFF COUPON sent out to owners of a MYSTICAL SUBSCRIBER NUMBER and send it direct to the Realtime sauna with their loot. Not bad eh? Lucky people who already own a MYSTERY SUBSCRIBER NUMBER will also be able to thrill to the opportunity of saving money on the Comcon Joystick Interface for the 48K Spectrum — there's £5.00 off the basic unit, and senders of another HOLY TEAR OFF COUPON can even save £10 if they want to buy a Comcon and a Quickshot 2 plus 2 joystick together!

Not bad deals, eh? If you haven't already got a MYSTICAL SUBSCRIBER NUMBER, its power passes you by this month, and none of these goodies will have reached you. Nor will you have a HOLY TEAR OFF COUPON or two to play with. Ahhh!

But there's more. The Casting of Rites ceremony performed in a misty field at midnight has invoked even more wondrous goodies, conjoured out of the ether by the power of the MYSTICAL SUBSCRIBER NUMBER. A complete set of all the software ever published by by PSS including a T Shirt and set of posters was spirited into the office and the subscriptions computer went mad under the flying fingers of Guru Denise. Totally at random, it printed out a label containing . . . . THE NAME OF THE OWNER OF A MYSTICAL SUBSCRIBER NUMBER!

Then the computer, which is full of copies of the MYSTICAL SUBSCRIBER NUMBER and is therefore prone to doing rather strange and wonderful things, communicated with Guru Denise, insisting that she send the PSS Goodiebag to the owner of MYSTICAL SUBSCRIBER NUMBER 210023. A certain N Williamson of Carlisle in Cumbria will by now have received the Complete Works of PSS — and all because the person had a MYSTICAL SUBSCRIBER NUMBER!

R OF THE NUMBER BURSTS FORTH!

ISN'T IT ABOUT TIME YOU GOT ONE TOO?

YOU CAN! All you have to do is send £15.00 to Guru Denise with the completed application form that appears on this page. But there's more still!

This month, novices who seek to avail themselves of a MYSTICAL SUBSCRIBER NUMBER will reap the benefit immediately. For they can choose to receive a free CRASH Binder as soon as their order is processed by Guru Denise, or they can take their pick from four Elite games. Yes, Novices seeking to gain the power of the MYSTICAL SUBSCRIBER NUMBER this month can have one free game — *Commando*, *Frank Bruno's Boxing*, *Bombjack* or the brand new, on the verge of being released, *Ghosts and Goblins*, previewed on Page 124 of this issue. Not a bad deal eh?

choose a free game!

Guru Denise says:

Don't forget to let me know if this is the first time you have had a MYSTICAL SUBSCRIBER NUMBER.

COMMANDO
This conversion of the classic Capcom Arcade game won Elite a CRASH Smash in the Christmas Special — 94% overall: "A first rate arcade conversion — very addictive indeed"

BOMBJACK
Another arcade conversion, Smashed in the April issue this year with an overall mark of 92%. High on Playability the General rating read "A great arcade conversion, don't miss it"

FRANK BRUNO'S BOXING
We looked at this one back in August last year, when there was a bit of a flurry of boxing games. Scoring 86% Overall the conclusion was that FRANK BRUNO had much more scope that all the others

GHOSTS AND GOBLINS
Not actually finished at the time of writing, but this arcade conversion looks set for great things. Read the preview on page 124 of this issue if you need convincing . . .

MYSTICAL SUBSCRIBER NUMBER APPLICATION FORM

Dearest Guru Denise
I would like you to ensure that the power of the MYSTICAL SUBSCRIBER NUMBER keeps working for me, so enclose a cheque or postal order for £15 as I live in the United Kingdom. (If I'm a European Person I realise I have to send £22.00, so I have.)

Please talk nicely to the computer that helps you look after all the MYSTICAL SUBSCRIBER NUMBERS and refresh mine or cause a new one to be made available for my personal and exclusive use.

My Name is .....

and I'd like my monthly copy of CRASH sent to me at:

.....

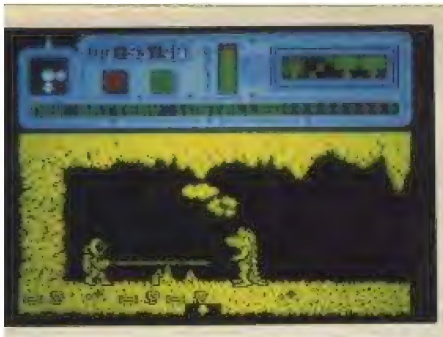
.....

..... POST CODE .....

Please make my MYSTICAL SUBSCRIBER NUMBER start with ISSUE: ☐

I've ticked one of the boxes which appear next to the goodies on offer to mark the one I'd like to receive, so please make sure I get my pressie.

- ☐ BOMBJACK
- ☐ COMMANDO
- ☐ FRANK BRUNO'S BOXING
- ☐ GHOSTS AND GOBLINS
- ☐ CRASH Binder



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AFTER THE EGG COMES . . .

CORE

ENCY TRANSMISSION . . . EMERGENCY . . . EMERGENCY TRANSMISSION . . . EMERGENCY . . . EMERGENCY TRANS

Distress signals received from Eroc 1 suggest all human life threatened . . .
Expect to find terminal situation . . . Prepare accordingly . . .

From A 'n' F comes CORE; teleport into this fully animated, icon-driven adventure and explore over one thousand full-screen locations. Will you find the pieces of the scattered brain and put it back together before yours falls apart?

In case of difficulty, Core can be obtained from Argus Press Software Ltd., Greenwood House, Dewhurst Street, Darwen, Lancs. BB3 2EN.

LLOYD MANGRAM'S FORUM

I am pleased to say that this month's more than overflowing mailbag contained a high percentage of very sensible letters (there have been months when this has not been the case!), and I think they make interesting reading. Subjects for discussion have been wide, but certainly a lot of readers have responded to Graeme (the Birmingham Godfather) Kidd's comments on the Spectrum 128; many felt a need to praise or cry out against Mel Croucher's interview, and there has been considerable response against comments made by Tony Bridges in a letter to the April Forum. Lots of CRASH readers also watch TV or listen to the radio, not that this is surprising in itself, but what is alarming is the fact that they do so has led them to discover my terrible secret — or so they think. But more of that later on . . .

One subject that has now sadly faded from these pages is the continuing battle for desk space, writing room and sanity with Rob Candy (see the Playing Tips if you haven't already), but doubtless the Powers That Be will annoint my sainted head with some other horror.

So, a difficult task to select a worthy letter of the month from such a good mailbag, but this one caught my imagination because of its feminist plea . . .

WHILE THE CAT'S AWAY . . .

Dear Sir,
I am a regular CRASH reader, and of course, Spectrum owner. I have noticed that 98% of the letters you print on your page are from teenage boys with the remainder from their dad's and one or two sisters. I can't ever remember seeing one from a mother in her thirties (early thirties) so here it is. (But will you print it?)

There is nothing I enjoy more when the kids are at school, and the baby's playing quietly, than a good session on the old joystick (or keyboard). I don't buy very many expensive games but occasionally manage to stretch the housekeeping a bit.

I love adventure games but, unfortunately, I'm not too good at them (I haven't completed *The Hobbit*). Platform games are another great favourite, at present it's Firebird's *Booty*, but I do enjoy games like *Blue Thunder* and *Harrier Attack* and of course *Sabrewulf*.

I bet there are hundreds of other mums who wait till their lads are at school and then have a sly go, so come on ladies, stand up and be counted. Perhaps in the future *Crash* will run a 'ladies page' just for us (Good idea eh Lloyd)??

Mrs Lin Rhodes, Lewisham, London SE13

I'm sure I have printed the odd 'mum's letter' in the past, but you're right — they're few and far between, and yet there must be plenty of housewives and mothers who find some time on their hands in the busy workaday and also have the inclination to play computer games. Let's be hearing from you then. However, not all female CRASH readers think I'm that wonderful as a letter called 'Fudging the issue' indicates. Anyway Lin, that's £20 worth of software for you, so you can update on some newer games than the ones you mentioned!
LM

NEVER PUBLISHED, SOB!

Dear Lloyd,
Many CRASH readers write letters in to express their views on something; or to complain or just for publicity. But about 99.9% of these readers are disappointed to find their letters absent from the next issue.

Of course it's impossible to print all the letters you receive, but what makes me so angry is that some people like Jeremy Conners and some others, have had their letters printed more than once.

I for one have spent at least £10 on stamps for the letters I have sent and haven't, and probably won't have any of my letters printed. But people like Jeremy are so horribly lucky and people like you are so terribly biased that I expect to see another of his letters soon, but none of mine (including this one). Why am I wasting my time anyway?

Mark Corder, Dunfermline, Fife

Perhaps you just like writing letters, Mark. However, as you see, sometimes even you can be lucky. The simple reason why some people get theirs printed more than once, is that usually they are follow-ons from an earlier argument. Sometimes they just are lucky.

FORUM FORUM

Dear Lloyd,
I would like to congratulate you on your generally excellent magazine. It is still the best magazine for the Spectrum but of late has become inconsistent and the Forum rather trivial. I do not object to any of the covers as I am not impressionable at fifteen years of age and I would like to say that the subject of 'obscene' pictures by Oliver Frey has over the last few months become rather boring.

I know that you have schedules to keep and the magazine is prepared well in advance but lately I have been disappointed when games that are in the shops do not appear in your magazine until either the next issue or the issue after that. Merely Mangram is good and so are the Playing Tips and Adventure Trail, but I find the popular Hall of Slime pointless due to the fact that most of the scores are made up anyway. I know for a fact that friends of mine have had a photo taken, made up some high-scores and sent them away to your magazine, where as often as not they are printed.

As to your ratings system I do not always necessarily agree with them and when being confronted with six CRASH Smashes in the February issue and eight in the March issue I think it becomes necessary to award a higher accolade to show the 'pick of the bunch'.

Justin Bickle, Plymouth, Devon

The Hall of Slime was always intended as a bit of fun, not to be taken too seriously, although totally pointless if people were consistently dishonest — an antidote the the very boring columns of tediously researched scores found in other magazines at the time. Even the title, 'Hall of Slime' was a joke at the expense of titles like 'Hall of Fame'. Perhaps today it has outlived its time, although the questionnaire results indicate continued popularity with some people. What do readers think?

I've spoken at some length in past issues about the timing problems that can arise with game release dates, seeing finished pre-release copies and actually getting a review out on the street. We're all too often in the hands of serendipity (LMLWD) when things go well, and whatever the opposite is when they don't! I'm glad to see you NOT complaining about having too many CRASH Smashes, but a 'pick of the month' is another trap really, sometimes forcing the review team to choose one game above another. I'm not saying it's impossible or even corrupt to do so, but it adds another element to the equation and forces us to be more hard and fast in decision taking than we feel is necessary. However, it's another option open to scrutiny in the questionnaire fine print.
LM

BYE BYE SAILOR

Dear Lloyd,
Help!!! could you please, please tell me whatever happened of the DK Tronics game *Popeye*? I saw it once in a shop in Weston and I thought it was fab! But as fate had it I didn't have the £7 to buy it, but when I did have, no shops had it in!!
I would also like to ask any readers if they have *Popeye* or *Tomahawk*?
DJ Tercroft, Weston-Super-Mare, Avon

Despair no more. Popeye has been re-released by Macmillan, ought to be in your shops now, and with luck there may even be a competition for it in this issue (don't know for sure at the time of writing).
LM

128 WHO DO WE APPRECIATE?

Our deeply beloved CRASH editor, Graeme Kidd, sparked off some controversy in the April issue with his comments on the 128K Spectrum. Lots have written in on the subject and there isn't room for all the letters, so to get as much in as possible, here are some extracts, kicking off with a long one that states the case for worry...

Dear Lloyd,
I thought I would write to you to air my views on Graeme Kidd's article about the Spectrum 128's future as a games machine in last months issue, and perhaps to encourage people to support the 128.
In his article Graeme was talking about the software manufacturers attribute to the new machine. And it seemed to me that most of them had no fixed plans for the future and were waiting to see how well the machine would sell. This is fine if the public are going to support it, but at the end of his article, Graeme said that due to the lack of software perhaps potential buyers of Clive's new machine should hold back and wait. I know not everyone would take Graeme's word as the gospel, but if software companies are not writing games until the machine sells, and the buyers are not buying because there is no decent software, then you might as well say goodbye to the 128.
I would not dream for one minute of 'putting' Graeme down as he is obviously a very highly respected member of the computer press working for such a magazine as CRASH, and I'm sure he and everyone else will want to see the 128 become a big success, especially after the recent sell out of Sinclair to big rivals Amstrad.
M Smith, Bournemouth, Dorset

Now, think about it Graeme. If we all waited for everybody else to buy the new 128, where would we be? Look at it from the point of view of the software companies. What is the point of making games for a machine which has nobody to play them? The obvious thing to do is to let somebody else make them, and only if it becomes a success do you join in. BUT you (at CRASH Towers) have told us all NOT to buy the 128. This means that fewer people will buy the 128, either because they trust your divine words or because they're incredibly gullible, and therefore fewer companies will make fewer games, fewer people will buy the 128 and so on, etc.
CRASH Reader, Shrewsbury, Salop

HELP!! My son has just sold his Spectrum Plus and is desperate for a Spectrum 128. As I am one of the many mums who know nothing at all about computers (a RAM to me is still an animal) maybe you would advise me on buying one! Is it a good buy and without being biased — is it worth the money???
Janet Midgley, Guiseley, Leeds

With the current spate of excellent Spectrum releases which, I may say, I never would of thought possible in early 1983, the Spectrum may now have reached its peak of technical excellence, and due to the release of the Spectrum 128 I am now worried that magazines such as yourselves, will concentrate on this new machine and leave us lesser-mortals behind in the rush. After all, the ZX81 was never heard of again after the Spectrum launch in 1982. I would like to know what decision CRASH will make about 128 coverage and eagerly await the outcome.
Justin Bickle, Plymouth, Devon

'128K UK! It's here'
Oh dear me! shock horror, fear
Woe is us. Woe is me
Is this the end of Crash as we see?

Am I too early or am I too late?
Oh my god! it's the 128
Will you change this mag as you show it?
Is this the end of Crash as we know it?

This 128K can't just be a myth
Is the 48K Spectrum on the edge of a cliff?
Us 48K owners can't take this anymore
Put us out of our misery and tell us the score

Will it be reviews for the 128?
Come on now you can tell us straight
If you do away with the 48K
Spectrum owners will rebel and you'll have no say

So take this warning while it seems quite clear!
Or else it won't be long till you are trembling with fear!
So keep up the game reviews for the 48K
Or it won't be long till you drive us away!
Stuart MacDonald, Falkirk, Stirlingshire
PS Your mag won't be the same with 128 game reviews every week.

Phew! The first point to make (he said with Graeme's unsafety razor at his throat) is that Graeme did not say **don't** *buy a 128. In fact he said; 'So if you are thinking about upgrading from your trusty 48K machine, the best advice is to hang on in there for a while, and see what happens.'*

The operative word was **'upgrading'** *and, as we have just seen with Amstrad knocking its price down by 40 to 139, the sentence made good sense. Graeme did not mean to imply that no one should buy the 128 but that caution in changing from 48 to 128 should be exercised. For people who do not own a 48K Spectrum, then the 128 is a sensible purchase. I hope this answers Janet Midgley's worries.*

Those concerning themselves over the gradual decline of 48K in favour of 128K games, now have Alan Sugar and Amstrad to take into account, and I suppose there's little doubt that the 48K Spectrum's days are numbered, but don't forget — there are a lot of machines out there and software houses are not going to dump the software over night.

Of course CRASH is bound to review 128K games, otherwise we would be letting down those readers who intend to upgrade, are doing so or may already have done so. This change in machines, complicated even further by the Amstrad takeover, is clearly a bit disturbing, but then progress usually is, and I would suggest everyone relaxes a bit, bides their time and sees what happens in the next few months.

So much for 48K owners, what about someone who already has a 128?
LM

INTERFACING TROUBLE

Dear Lloyd,
I am the proud owner of a Spectrum 128, a computer which I heartily recommend. I am satisfied very well by the 128, but not by the service or attitude of Boots, who supplied it. The package comprised of the 128 computer, a tape recorder, two manuals, two free Ocean games, a Cheetah joystick and interface, software vouchers and a 15 general Boots voucher. A few hours later I discovered that the interface didn't fit.
I returned it next Saturday and was issued a replacement which was shown to fit. I then wasted several hours convinced that I was doing something wrong when the joystick still failed to work. According to Sinclair, it is 'IN 31', ie Kempston compatible, but the computer didn't seem to realise this — the Kempston option didn't function. I returned it that afternoon, and the replacement was tested on my computer in the store. An assistant loaded *Robin Of The Wood*, the computer 'expert' was busy nearby with another customer. First of all she tried the Sinclair option, then the Kempston one — neither worked. She then sought the advice of their 'expert', who told us that they'd recently been contacted by Sinclair about an unidentified fault in the interface. He said initially that he'd known this for a couple of days. I replied that was when I'd bought the 128 and wanted to know why I hadn't been informed of the fault. He now said that they'd literally only just this minute heard. He then tried to find the letter and despite only having had it for 'literally' a minute, he'd lost it.
Then the assistant, who previously hadn't had a clue about what was wrong with the interface, transformed into someone who very professionally showed me the relevant paragraphs of

the newly found letter and casually assured me that I'd get a working version when the fault had been corrected.

It seems to me that although the faulty interface cannot be blamed on Boots, they are taking advantage of people by readily accepting their money but not being so willing to tell them about a potential fault.

Now a piece of advice for 128 users, when changing the Ear and Mic leads, the Reset button is dangerously close.

I've also noticed two traitors among your staff, John Minson — a *PCW* spy and Franco Frey — an ex-*Computer Choice* spy. Get rid of them before they ruin your superfluously — (LMLWD) — ace magazine.

Nathan Byers, Taunton, Somerset

Working backwards, I can assure you that Franco (the frugal) Frey has never done anything for Computer Choice. *As for John (Aloha) Minson (the man who's shirts scream for merciful release), I'm afraid to confess that he does bits and bobs all over the place and (whispering) sometimes in places you'd be most surprised about.*

For my part, I'm not surprised that Boots seemed a bit confused about the interface problem — they weren't the only ones to get caught out, but it doesn't excuse that particular branch's casual attitude.

LM

THE SECRET'S OUT OF THE CADDY BAG

Dear Lloyd,

Hello, what was that? Lloyd Mangram was the course record holder with 64 until Nick Price broke the course record on Saturday 12 April 1986.

Apparently, his record stood for 36 years so it must have been hard to break. Well done Lloyd! I have an idea to stop all the stupid letters that arrive in the Forum about your real identity or what you look like. Why not have a competition where CRASH readers have to draw you and the nearest looking wins a prize. You could print the winning entry at the top of the title page every month as well.

Lastly I love the beautiful colour reviews that have appeared in CRASH and some good recent examples are *Winter Games* and *Bomb Jack* and *Three Weeks in Paradise*. Thank you very much for this as it brightens up CRASH a great deal.

Aaron Brown, Chesterfield, Derbyshire

What's he talking about? I'll tell you, Aaron, like lots of other attentive radio listeners heard an item that golfer Nick Price has broken a record at the American Augusta Club's prestigious 'Masters' championship. Read on.

Disregard all the other claims of knowing your identity, I have found it. I was watching golf on television the other day, the US Masters to be exact. The commentators were talking about the record for the Augusta Golf course in Georgia, USA, when who's name should come up but Lloyd Mangram, that's right your identity is finally out.

May all your holes be birdies.

Jeremy Weston, Box, Wiltshire

This means that the picture of Derek Brewster is a picture of you, alias an 83 year-old man with glasses! Derek's picture is in actual fact in Robin Candy's pages! So you are being bribed by the person with the psuedo name 'Robin Candy' to pretend you have a false name, and therefore get lots of letters.

1 Have you got any pictures of you as a golfer? 2 Please can I have a Monty Mole comic strip? 3 Why don't you have letters from Chinese people?

I know you are 83 but you should be able to read my writing,

Tim Borring, Kimbolton, Huntingdon, Cambs

Apparently, some person named Lloyd Mangram had scored 64 in the US masters some 40 odd years ago. So here you have it, a 65 year old drunken computer maniac who can't afford a new typewriter!

Hayden Reeve, Boston Spa, Yorkshire

Okay, great hoots of laughter etc. But let's get one thing straight. Yes the person you refer to was a famous golfer, BUT HE WAS AMERICAN! Anyone can tell from my writing accent that I'm a true blood Brit through and through. Besides which, and you can check this one out, his name was not Lloyd Mangram, but Lloyd MANGRUM with a 'u'. Good try guys. Now where did I put the putter . . . .?

LM

UNDER PAR FOR THE COURSE

Dear Lloydy Baby,

Picture the scene, there I am, cruisin' down the freeway in the ol' Chevvy, when suddenly, what appears over the horizon but my friendly neighbourhood computer store. 'Gosharootie', exclaims I. 'Must boogie on in there 'n' see what they've got in the way of software'. So in I go and what confronts me but a large green box bearing the phrase *Nick Faldo plays the Open*. After pondering for a short time, I purchase this item. I take it home. I load it. No problem with the hyperload. Not a bad little game. Next day, I load it. No problem with the hyperload. Not a bad little game. Next day, I load it. Unbeknownst (LMLWD) to me, my tape deck's feeling hungry. Crunch! Silly me I think. Must've been my fault. So, at the next possible opportunity, I buy another *Nick Faldo plays the Open*. I load it. Not a bad little game. Next day, I load it. Crunch! Another tenner bites the dust.

Never having had a tape chewed up on me before, and now two in ten days, made me a bit suspicious. Upon examining the defunct cassette, I find it to be of very inferior quality, especially where the tape joined the reel. So, writing to Argus, I explained the situation. They wouldn't have it, however, and insisted I paid another £10 for another copy. I did. It lasted less than 48 hours. Crunch. This is getting beyond a joke. Thirty quid in a month for nothing, and it was down to pathetic quality tapes.

So, how's about it, Argus?

While we're on the subject of golf, you wouldn't happen to be related to the LLoyd Mangram who won the Open in about 1953 would you? Oh well . . .

C Benson, Hamilton, Lanarkshire

I can't say that we've ever noticed any problems with Argus tapes before. Maybe they've changed cassette manufacturers or duplicators, and maybe, a problem that befalls most software houses from time to time, they've suffered a bad batch which, as they tend to stay together, all ended up at your friendly computer store. Any comments from someone at Argus?

LM

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"I much preferred the Microdriver for speed and ease of use." Iolo Davidson — Your Spectrum

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THE MEL CROUCHER AFFAIR

Dear Lloyd,
I read with interest Graeme Kidd's interview of Mel Croucher, concerning the latter's views about the advent of a more exciting home computer age, and more and more original games being produced for more advanced computers. I admire the way in which Mr Croucher tries to implement new and more non 'derivative' computer games onto the market, such as *ID* and *Deus Ex Machina*. One has to agree that very few games on the market are totally original and not derivative.

But, does Mr Croucher realise that people on the whole generally enjoy these games, no matter how banal they are, or however pointless they appear to be. For instance, let's look at the latest (April) CRASH Hotline chart, and to be more specific the Top 10:

1 Elite (shoot em up/strategy)
2 Commando (shoot em up)
3 WOTEF (karate/beat em up)
4 Fairlight (arcade adventure)
5 Starquake (arcade)
6 Matchday (strategy)
7 Back to Skool (arcade adventure)
8 Hypersports (sport)
9 Gyroscope (arcade)
10 Highway Encounter (arcade)

Nothing very original of non-derivative there, is there now? This seems to prove my point. Mr Croucher complained last year about the retailers' blind spot for *Deus Ex Machina*, maybe they thought the public wouldn't enjoy those sort of games. And, judging by readers' present opinions they seem to have got it right. Look at the 1985 CRASH Readers' Awards, any totally original games there? *Deus Ex Machina* probably didn't do well because, amongst other reasons the public didn't like it. It will be very interesting to see how well *ID* will sell. Mr Croucher will probably agree with me that he enjoyed writing and playing *Deus Ex Machina*, like many programmers would say about their games. So a logical conclusion is that more programmers enjoy writing games like *Commando* than other programmers who enjoy writing games like *Deus Ex Machina*. And it seems to me programmers attitudes seem to reflect on the opinions of the games players.

Before I finish, I would like to raise two more quick points. Mr Croucher claims that teenage programmers do not possess an active imagination, and thus they can only be 'derivative'. To suggest this is utterly ludicrous, why, of course 14-15 year olds have a perfectly good imagination. Then Mr Croucher says that they do not have the vocabulary to express their thoughts! Was Mr Croucher ever 14? I doubt it. Sorry Mel, I think you've got it wrong.

Mr Croucher then suggests that the unimaginative 14-15 kids are getting bored of computers like the Rubik Cube. Rubbish! The average age of a CRASH reader must be about 14-18 and the growing popularity of any magazine can only suggest that enthusiasm is increasing rather than being 'stuck away under the stairs'. So kids aren't becoming bored of the old concept, contrary to what Mr. Croucher says.

Otherwise it was an interesting article and Mr Croucher brought up many good points, the answers to which only time can tell.
Guy Walters, Beaconsfield, Bucks

Guy wasn't the only one with reservations...
LM

I am writing in complete disgust about your Mel Croucher interview. It isn't CRASH that I'm disgusted with it's Mel! He says (section on senseless violence, last paragraph) that us kids of 14-15 years (I am one of them) are incapable of coming up with an original idea and even when we could, we wouldn't have the vocabulary to express it. Listen to the words of a man who is damning the youth of society. How pathetic this man is.

The software that us 'kids' turn out may well be derivative, but that is usually due to us not being brilliant at artificial intelligence techniques. There is one game however, which was programmed in BASIC, was not technically excellent, and didn't even get a good review. The game is *Frank the Flea* reviewed in the same issue as the offending article. There was not one bit of killing in it. He even contained some compassion in that the end is when the flea meets its mother. Try and sneeze at that one Mel.

I am considering an artificial intelligence game at the moment. *Pipe dreams*, 'Kids' dreams,' Mel may utter, but I know I have the capability to design and program it, and definitely the imagination. As I read the interview, I became more and more sure that Nuwave was the company best suited to it, but when I came to 'that' line, my mind snapped off the idea instantly, and its present state is not likely to change unless Mel changes his very destructive views. To sum up, I think Mel had better look at a few of the 'kids' around him, and instead of seeing them as mindless prats hell-bent on killing, try considering what a benefit they can be to software.

Yours enragedly,
Simon Tillson, Littleover, Derby

...and there was some agreement too...
LM

I read with great interest Graeme Kidd's interview with Mel Croucher, a man with whom I share many views. I am a 16 year old student, who has had the pleasure, and sometimes the annoyance of owning a 48K Spectrum, for the past 2 years. I have seen and watched with great interest how the Computer Industry has changed. In the past 4 years the Spectrum has been enhanced to its supposed limit with new software.

We have been flooded with hardware like the Microdrive, Wafadrive, Interface I and many others, yet where has this lead the Industry? Instead of improving I think it has dis-improved, providing re-runs of old computer scenarios, like platform games and lately the wonderful if over-used sporting idea. What the industry is lacking is innovative ideas, the like of which Mr Croucher seems well able to apply to his skill with computers. I have yet to encounter *ID* which sounds interesting, if slightly limited in game-play.
Mark Beatty, Carrickmines, Dublin

BEING TOO FRONT UP

Dear Lloyd,
I have always been impressed by CRASH's policy of letting its readership air its view. The support of freedom of speech is highly commendable. It was with this in mind that I read April's Forum. I was amazed to see Mr Birch's letter in support of advanced advertising. I find it incredible that someone should actually believe that the companies involved should advertise so far in advance merely to give the public enough time to save its cash! Surely Mr Birch jests?

Interestingly, your magazine also published a letter by Gary Mays of PSS. His version of the advertising quandry seems much more plausible. Advertising in the software industry is obviously as important as it is in any other industry. Without it sales would, of course, be smaller, but this is no excuse for over zealous trumpet blowing.

Mr Mays appeared to miss the point that a lot of people are disappointed and frustrated by having games advertised but unavailable or worse, not even completed. Worse still is the taking of money for non-existent products. PSS may not cash their cheques but I'm sure there are those who do. In addition, what does Mr Mays think his paying customers were doing while they were waiting for the postman to deliver the long awaited jiffy bag? I hardly feel that people consider themselves fortunate to have such altruistic custodians of their hard earned cash (before you point out that a cheque is only a piece of paper until cashed it is worth remembering that postal orders have to be paid for in advance).

What harm is there in finishing a product before advertising it? The reasoning behind advanced advertising would appear to indicate a certain lack of faith in the products produced. Are software houses so uncertain of their market that all their releases have to be mega-hyped for them to be successful? A game should be able to sell on its own merits without being dangled carrot-like in front of the consumer for months on end.

Personally I wait until I've seen a program running before I buy it and I suspect many other people do too. All the pre-production hype is wasted it would seem.

I can understand that synchronising the release of a product and its advertising has its problems but surely this situation can be overcome or at least improved upon. Mr Mays can sympathise all he likes but it doesn't in any way make up for the anger felt by a good many people. It's about time these people got their act together because sooner or later someone's going to find themselves without a paying public.
Martin Wright, 16a Copperfields, Chigwell, Essex.

I'm fairly certain that a marketing man would tell you there is great value in pre-publicity and early promotion as a means of making punters aware of a product. On the other hand there is also an unwritten rule which says that major promotion that misses availability of a product in the shops is a big killer. You can have successful sales with very little promotion, but again statistics show that a careful build-up is essential to make a real success in all but fluke circumstances. Once the launch period is over, I think word of mouth is the most powerful advertisement anyone can have, and the nice thing about that is that it's free! All you need is a good program.
LM

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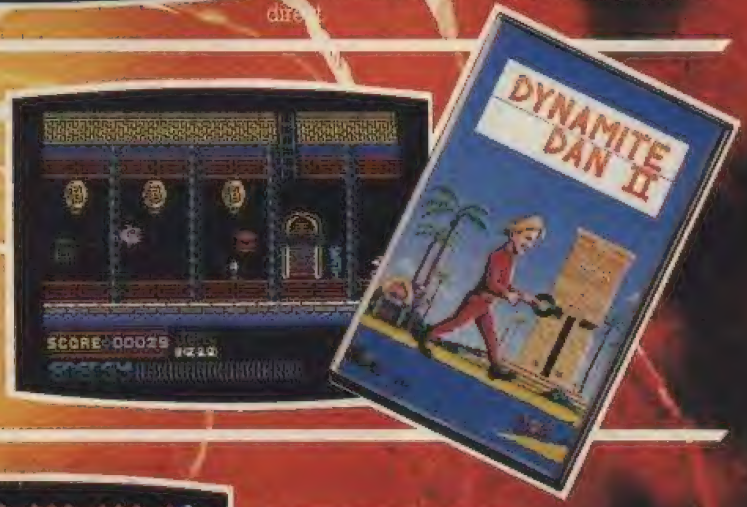

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ADVENTURE UPSET

Dear Sir,
In the September 85 issue of CRASH, Derek Brewster reviewed an adventure that I co-wrote with Hon Lemmon called: *Project-x the Microman*. The review was quite lengthy and detailed, although Derek made several incorrect observations whilst playing the game, for instance he said that after making a bridge across a crevasse using a twig (in the adventure you are only 3 inches tall), that there was no mention of a bridge being made. If he had looked he would have seen that there was A TWIG FORMING A BRIDGE! If that's not a big enough mention then I don't know what is! However, being considerate and thoughtful adventurers, we noted Derek's points about the unfriendly vocabulary, more helpful prompts etc, and made many important changes to the game. We wrote to the Signpost section of his adventure column and pointed out the above changes, but the letter was never published, so we left it at that!

Six months later we had the good fortune to be approached by Global Software with an offer to include *Project-x the Microman* on an adventure compilation tape which was to be called *Fourmost Adventures* (because there were four games on it!) We jumped at the offer, and eagerly awaited the all important CRASH review. It eventually appeared in the April 1986 issue, and to our total amazement Derek Brewster had not even bothered to re-appraise the game in its much improved format! He gave it exactly the same ratings as he did the first time round.

Now when a game is criticised, either fairly or otherwise, you would expect changes to be made to that game, taking heed of the criticism. Well, we made the changes, but Derek obviously couldn't be bothered to check and see if his comments were noted, so why did he bother to make them in the first place? An adventure reviewer's job is much harder than that of a games reviewer, simply because of the time needed to solve the game and the brainpower required to work out whether the solutions to the problems are possible to achieve in real life.
Tim Kemp, Norwich, Norfolk

Obviously there's not a lot I can say to that, but no doubt when Derek gets to read his copy of this issue, he'll think of something!
LM

PULL OUT PROBLEMS

Dear Lloyd,
Why, oh why do magazines have 'Pull-out Supplements'. I can see no logical reason for them. (But there again, where has logic come into play at CRASH Towers)? If you don't break nails or rip up your fingertips opening the staples in the mag to 'pull-out' the supplement, then you do so trying to close them up again.

Once you have got the supplement out, I find that within a week the blasted little thing has disappeared without a trace. I've managed to keep a watchful eye on RC's little pain of a supplement, but with other 'add-ons' from other mags, (which will remain annonymous), the case has been the same each time: they have all gone 'Missing in Action'.

'Ah', I hear you cry, 'but if we didn't put in supplements, we'd have to use 'perfect binding'. (Mentioned in the reply to Tony Bridge's letter, April 86). Well, I have worked out that 140 (Number of pages in April 86) add 24 (Number of pages in RC's little number) doesn't exceed the maximum number of pages: 196! (Also mentioned in the reply to Tony Bridge's letter).

So, Lloyd Mangram, let's see you wriggle out of that one!
Nicholas Green, Christchurch, Dorset
PS Is Derek Brewster as young as he looks in his portrait at the start of Adventure Trail?

No, no, no, you've got it all wrong, the pull-out supplement was to add consumer appreciation status to the issue, not to avoid 'perfect binding'. In fact adding sections to the mag is exactly what takes you towards that magic figure for perfect binding. The alternative is what's called 'loose leaf', just slotted inside the pages without being stapled. But these always want to fall out on the newsagents' stands and then readers complain about being ripped off. besides, just because it says 'pull-out' doesn't mean you have to. And yes, Derek does look that young in real life, in fact the drawing does little justice to his handsome dashingness (okay Derek, you own me one now . . .)
LM

ALL THAT GLITTERS

Dear Lloyd,
I decided to put pen to paper, and write to you about the much aired subject of cassette presentation. Whilst I am in favour of big packaging, I think these cases should be strong, good quality boxes, and not flimsy ones likely to get battered and worn after only a few days of being bought (Please take note Beyond)!

Also, I think these new double cassette cases, like the *Winter Games* and *Movie* cases are awkward and pointless. The manufacturers and software companies claim that other cassettes to go in these cases are coming, but so far no signs of these have emerged.

Some people complain about the lack of detailed instructions with some games but if more were offered, these might give too much away about the game, thus detracting from its enjoyment. Ultimate's games, for example, have well presented instructions, but these nevertheless are very vague, but this doesn't take away any enjoyment from their games. At the other extreme, careful instructions, or a well written manual can create atmosphere, and add a lot to the enjoyment of games. *Elite* is a prime example of both good quality packaging and an excellent manual. Well done Firebird!
Dominic Spray, Watford, Herts

Obviously you can't get big manuals in ordinary audio cassette cases, but in general I still think I like the old fashioned cassette packaging the best. It all sits neatly on a shelf and looks good, easy to stack and easy to look through quickly. But then, I always was an old fashioned thing.
LM

TECHNOLOGICAL PROGRESS ISN'T ALL IT'S CRACKED UP TO BE

Simon Shepherd's letter about the delights of turbo loaders also sparked off some more ideas on the subject of progress in general . . .

Dear Lloyd,
Grovel, O Mortals, I am the High Priestess to the shrine of the rubber keyed Spectrum. Slowly my disciples are turning to the Spectrum plus and A NORMAL KEYBOARD! I want to hear that all my remaining believers are writing in to let CRASH know the faith in rubber keys is NOT DEAD!!
The almighty Wiz!
Sarah Lillington, Chard, Somerset

I am writing on the subject of turboloaders. So far Simon Shepherd is the only person to write in agreeing with them. All other letters have been

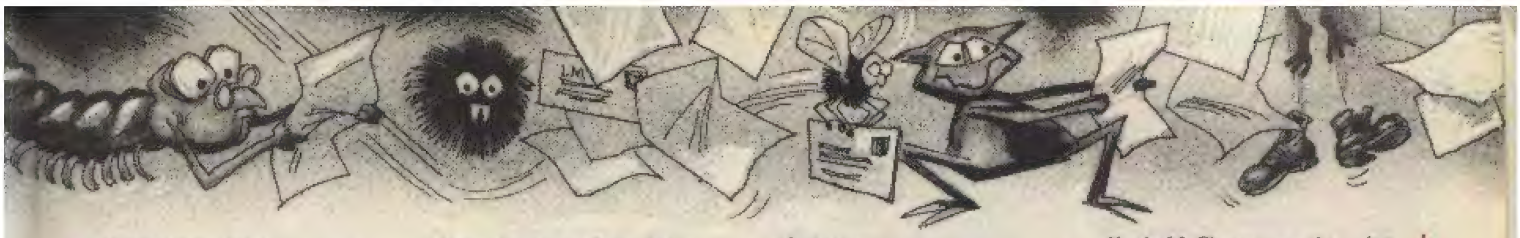
ABRIDGED BRIDGES

The long letter from Tony Bridges complaining about the price of the Christmas CRASH Special, sparked some controversy, most of it (I'm surprised to add) favourable. Here are a couple of typical letters . . .
LM

Dear Lloyd,
BORING ! (Oh no, I hear you say, but just hear me out). I am of course referring to Mr Tony Bridge's letter in Issue 27 of CRASH, which was two pages long (including your answer). We didn't need to see what Mr Bridges was complaining about, we already know. The Christmas Special was fantastic and well worth the money, just for the poster. Mr Bridges and all his other hypocritical friends can p*** off! We don't need you and we don't want you and you don't deserve two pages to sound off your hypocritical crap. Mr Lloyd, in the future, bear in mind the poets of this country who never get their letters aired, and throw the likes of Mr Bridges letters in the bin, where they belong.
Jason Behan, Stockton-On-Tees, Cleveland

Strong stuff indeed! The next writer was somewhat more polite . . .

£1 and £1.95 for the Christmas Special, I mean what has CRASH ever given us? Well they have given us LM's Forum, Playing Tips, Merely Mangram, Bug Box, News Input, Reviews, Compo's, Jetman, Crash Course, Adverts, Top 30, Adventure Trail Frontline, LM's Hall of Slime, Techniche, Previews and Special offers is what CRASH has given us, so stop complaining because it's worth it!
Chris Brettell, Brewood, Staffs



complaints. I have experienced no problems with Speedlock etc, but I think software houses should take a look at Durell. *Saboteur* and *Turbo Esprit* (I bought both) have one turboload side and one ordinary load. So if you do have problems with the fast load, you can load in the other side.

Turboloaders present no problems for people with 007 interface, twin deck, fast copy programs, so this system of Durell's should be used more often.

Lenslok. In my opinion lensloked games sell less copies than ordinary ones. If 50 copies of lensloked and ordinary games (eg *Tomahawk*) were put on sale then the ordinary copies would sell quicker. And again Lenslok poses no problem for the 007 interface enter the code (if you can) and then save to tape. Hopefully the software companies will see this point of view, and will follow Durell's lead.

Dave 'Lilbo' Lilly, Nailsea, Avon

The software protection devices continue to flummox, irritate and defy those who suffer them and amuse those who find simple ways round them. But what about the games they're protecting? Kevin McClearn's letter introducing us to what he called the 'K' factor, prompted quite a bit of response from readers . . .

His 'K factor' is not just Irish mist but does have reality. I have been a games player for over 20 years playing wargames, board games and latterly computer games on the ZX81 and Spectrum. Computer games are first and foremost GAMES. The essence of a successful and lasting game is its ability to involve as completely as possible the participants.

The lasting games, those that in ten years time might stand in the same class as *Monopoly* or *Diplomacy*, will be those that are, at heart, good GAMES. At the moment most Spectrum games designers appear to be concentrating on those with the greatest visual appeal. Much of your reviewer's and others attention is concentrated on graphics and the visual presentation. Very little attention is paid to playability or how good or taxing is the game content or how well the game immerses the player in its plot or whatever.

So, message to your reviewers; all that glitters is not gold — pay more attention to content rather than visual gimmicks.

AR Walker, Henleaze, Bristol

There's always a danger with a new innovation, that its technical and novelty appeal may overwhelm actual content. This was clearly the case with arcade machines and then with home computer games. I think you're absolutely right that the 'classics' will be those where the game content is good. Obsession with the novelty factor in home computer games was fortunately short-lived, replaced by a more advanced interest in gameplay design and content — at least for some programmers, of course there are always some who think fast sprites and a repeat idea is sufficient. Let's hope the medium will survive as healthily as novels, not necessarily 'looking' different from each other, but packed with new ways of looking at 'life' in a manner that appeals, engages interest and provokes thought.

Here's some more thoughts on the subject . . .

LM

Kevin McClearn says that a lot of software these days is too original for its own good, I agree with him in some respects, namely the utterly boring *Deus Ex Machina*, but Kevin also underlines games such as *Gyroscope*, which received a CRASH Smash and which I found to be excellent

Kevin then went on to mention that there were some games which were original but also highly playable such as *Commando*, *Yie Ar Kung-Fu*, or *Fist*. *Commando* isn't original really it's just a Jazzed Up shoot em up and as for *Yie Ar Kung-Fu* being original! There are millions of martial arts games on the market at the moment.

He also mentions the 'K' factor, that games without this factor are crap, like one certain game he mentioned called *Tau-Ceti*, which again is mega-brill and which received a CRASH Smash. But after all it's just a matter of opinion isn't it?

B Charlton, Sunderland, Tyne & Wear

Yes indeed, it is all a matter of opinion, and without diversity of opinion life on Earth would be very boring (Lloyd's tendentious moral for the month)

LM

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SPECTRUM PETS

Dear Lloyd,
Please could you tell me if someone is converting the *Little Computer People* from the Commodore to the Spectrum. If they are, how long will it be?

I have asked this because I saw it being played on the Commodore and thought it looked good and it was when I tried it. Soon after that I saw it again at Boots in Reading. I then went to the counter and asked if there was a conversion job being done. The reply to this was yes and it should be out soon, so I thanked the nice little man and on my way feeling very excited.

That was before Christmas! And I am writing to you four months after Christmas and there is still no sign of this excellent game!!!
Richard Hennessey, Fleet, Hants

Shame isn't it that little nice men are not always as well informed as they should be? I don't know where your Boots assistant got his information from but there isn't (and never was) any intention on Activision's part to convert LCP to the Spectrum. The main problem is that the program depends heavily on continual disk access, something conspicuously missing on the Spectrum. The 64 cassette version wasn't anything like as successful as the disk original version. There are plans for an Amstrad disk version, but more Amstrad owners have disk drives of course.
LM

ARMS AND LEGS IN IRELAND

Dear CRASH,
I am writing to complain about the price of CRASH. I know you're tired of people saying 95p is too much, but I live in Eire and the usual price I pay for Crash is £1.43, until last November when it was £1.52, then the Christmas Special cost £3.12. In February it was back again, £1.52. By this time I was thinking of stopping my order but I said I would wait and see next month's CRASH with the Free Playing Tips Special. It was meant to be free, CRASH cost me £1.63 that month.

How come CRASH never goes up in England? I know you have to send your copies across the sea and still make a profit and change the money for them from Punts to Sterling but £1.53 onwards is a ridiculous price to pay when £1.30 at least would be a fair price.

Have you gone mad asking this price? CRASH is a great magazine so can you do something about bringing down the price in Eire? Because many of my friends and I won't be able to afford to buy it.
Philip Curry, Dublin 8

I sympathise with you Philip, but a point needs to be understood here. It isn't 'us' at CRASH who decide what price the Eiran shops charge. Indeed we don't actually send the magazines anywhere, that's done by international distributors, over whom this company has very little control. The best thihg I can suggest is for you to subscribe directly. The sub does cost a little bit more than in Britain (because of the exchange rate), but I think you'll find it still works out much cheaper than you are currently paying by getting CRASH through the shops in Eire.
LM

A DIFFERENT SORT OF ADDICT

Dear Lloyd,
Why is it that you assume all your readers are games addicts? You certainly seem to give this impression. For example, looking through the April issue, we find that almost everything is to do with games. What with Adventure Trail, Frontline, Hall of Slime, Playing Tips, Signstumps, Merely Mangram and previews of games, 'it's in the post', games AGAIN, the CRASH readers award gives results for voting about the best games, competitions to win games. I could go on but I'll try not to. Admittedly there is CRASH Course but I am not particularly interested in things like Evaders. In fact, I am sure that very few of your readers even read this section, let alone buy the software.
DG Oldblum, London. NW11

CRASH was always about games, not necessarily just reviews, and not necessarily arcade games, but games definitely. While the mag's scope has expanded in recent months to cover some more serious aspects of using the Spectrum, games are still the primary reason for existence. I think that answers your letter pretty simply.
LM

FUDGING THE ISSUE

Dear Lloyd,
As president of the **We've had it up to here with LM and if he doesn't acquiesce to our extremely reasonable demands we're going to show Mary Whitehouse your December issue and let nature take its course** society, I have a few questions that I would like to put to you, if I may — so spill the beans sucker or you're dead meat:
1 Why do you always either a)1 fudge the issue or 2b)1 use smart alec comments when answering complaints, but accept praise with a 'credit where credit is due, ie to me' smarminess?
2 Is your pathetic 'me vs Candy' fixation due to the fact that Candy is a good-looking, capable, intelligent, worthwhile computer literate and you're not?
3 What do you have against girls, and did you know that if you lot refer to us as 'fellowesses' or 'chapesses' again you are going to end your days as ornamental heads decomposing on the spikes of London bridge.
4 When are you going to do the decent thing and hand Forum over to the competition minion, hey?
5 And this is the big one, kid — Is your face covered in warts, and if not prove it and end our nail-biting suspense — PUBLISH A PHOTO!
Louise Bagshawe, Wadhurst, East Sussex

I'm shattered. That's completely ruined my day, if not entire week. I've never knowingly fudged an issue, in fact I'm highly regarded as a 'straight from the shoulder man' (it comes from all those golf swings). There's never been any 'Candy fixation', unless you regard just retribution for being bunged off your desk a fixation. I have nothing against good-looking, capable, intelligent, worthwhile computer literates, but we're talking about Robin Candy here. Any linguistic chauvinism in CRASH is all due to Graeme Kidd (I never said that) and the comps minion (to whom you want me to hand over the Forum)! And as for a photograph, now everyone knows I'm a drunken 83 year-old ex-famous golfer, you know why there's no picture. Now none of that was smarmy was it?
LM

That's it then for June. I must away up the hills to my cottage to sensibly employ the lengthening day in planting out the runner beans, practising my 250 yard drives and brushing up flat green putting techniques. In the meantime I may find some time to look at some of the forthcoming releases for Merely Mangram and get a go on the arcade machines which even now are pouring into Ludlow town centre for the annual May Fair (see last year's issues for further details)!

If you have any comments to make on CRASH, the Spectrum universe, books on origami, games software, other readers, the finer points of Lithuanian judicial procedure or simply feel like making an existentialist statement on Cartesian mathematics, write to LLOYD MANGRAM, THE CRASH FORUM, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB. Who knows, I may even read them.

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GENESIS

THE BIRTH OF A GAME

We've teamed up with Domark, the software publishers and game marketers supreme and Design Design, the programming team behind a good number of very respectable games, and can now bring you the chance to win fame and fortune!

By combining the programming and marketing talents of these two companies, a powerful force indeed is created which ought to take the games world by storm. All that's missing is the concept, and once that little problem has been sorted out, there's no reason why a real MegaGame shouldn't be on the shelves in time for Christmas. Which is where you, dear CRASH Reader, come into the picture.

This is a competition. The prize is at least £1,000 in cash as well as a number of very interesting days out with members of the CRASH Team, Domark and Design Design. You see, we want you to supply the idea for a game so that Design Design can write it and Domark can publish it. Your reward, apart from the fame of appearing in CRASH and on the inlay of the game (which will be produced by our very own Oliver Frey by the way), comes in the form of loot.

If you win the competition to design the game of a lifetime, you are going to receive around 10% (pending final contractual negotiations) of the royalty Design Design collects from the publishers of the game, Domark. This could amount to rather a lot of money if lots of copies of the game are sold, but there's a guaranteed minimum £1,000 pledged for the person (or team — involve your friends if you like) who comes up with the concept that gets turned into a game.

CRASH readers know what's what in the world of Spectrum games, and it's about time they were given a real chance to have their say. Over the page, there are a few words from GRAHAM STAFFORD of Design Design which should prove helpful when it comes to putting your ideas into order before entering this competition. He's given a thumbnail sketch of the kind of things that Design Design need to have in order to sit down and write a game, as well as some pointers to the kind of things you have to bear in mind when dreaming up a Spectrum game. Study his words carefully.

Take a read of the Competition Rules presented here, and send you entry to GENESIS, PO BOX 10 LUDLOW, SHROPSHIRE, SY8 1DB, making sure it arrives before the 31st July this year.

WE'VE GOT PLANS FOR YOU . . .

Over the coming months we'll be following the creation of The Christmas Game (working title, working title). Next issue, with a bit of luck, we should have a progress report. Then full coverage of the Day of Judgement will follow and once a winner has been sorted out serious work can begin on actually making the game.

The winner(s) will obviously have to spend a bit of time with Design Design, discussing the game idea further and refining the possibilities, and CRASH will sit in on the meetings, reporting back to everyone else.

As soon as the game is in a previewable state, a copy will be sent to Ludlow, Cameron will give it the full photographic treatment and a Lloyd is booked to write a preview. Meanwhile The Designer will be let into some of the secrets of getting a game into the shops, and Domark will explain how a game has to be advertised, promoted and sold to distributors and retailers. A day in London at Domark Towers is to be set aside to reveal some of the mysteries of the marketplace to The Designer, and once again, CRASH is going to be invited along too.

CRASH will follow Design Design, Domark and The Designer up to the tape duplicating factory where thousands of copies of the finished game are to be produced, reporting on the way and means of making lots of copies of a single Master. Oliver Frey is servicing his airbrush specially so that it'll be in tip top condition for producing the inlay artwork to go in the cassette, and there's no reason why The Designer shouldn't spend a day in CRASH Towers meeting Oli and the rest of the Team.

Then the review of the completed version of The Game is booked for the November issue of the magazine . . . will it be a Smash? We don't know, but you can be sure the game is going to receive the usual CRASH treatment.

Play your part in the creation of The Game of 1986. Get your thinking caps on, read the rules and study Graham Stafford's words of advice. Then get designing. This could be the start of something big. That's BIG. BEE EYE GEE.

RULES

1) This competition is open to anyone in the world, providing they are reading this copy of CRASH!

2) All entries for the GENESIS, BIRTH OF A GAME competition must be received by CRASH by 31st July 1986 to qualify for consideration by the judges of this competition. Newsfield Publications regrets that no responsibility can be taken for late or missing entries through the Post Office service.

3) All entries will become the physical property of Newsfield Publications and we regret that material cannot be returned unless accompanied by stamps of sufficient value to cover the return postage charges.

4) Newsfield Publications pledges that all material, ideas and concepts shall be treated in full confidence and shall not be passed on or used for any purpose other than the competition. The overall winner is deemed to retain copyright at all times, but entry to the competition is subject to complying with the terms and conditions laid out under these rules.

5) The winner's name and photograph will be published in CRASH.

6) The winner will be entitled to a percentage (10%ish) of the royalties received by Design Design, such royalties being guaranteed to be at least £1,000 over a 12 month period from launch of the game.

7) Employees and Agents of Domark Ltd, Design Design, Newsfield Publications and their relatives are excluded from entering the competition. The decision of the panel of judges, which will contain a wholly independent judge, will be final and no correspondence will be entered into.

8) Entrants under the age of 18 years should have the consent of a parent or guardian to enter this competition.

ENTRY FORM

Please fix firmly, securely and permanently to your entry!

GENESIS: BIRTH OF A GAME COMPETITION

PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB

NAME .....

ADDRESS .....

.....

..... POST CODE .....

TELEPHONE NUMBER (if you're on the phone!)

.....

The DESIGN DESIGN crew in jovial humour threaten to damage our photographer with a hail of elastic bands . . .

Seeing as the chaps at DESIGN DESIGN are the people who are actually going to have to write the game designed by the winner of the GENESIS: BIRTH OF A GAME competition, it seemed only fair and sensible to ask a Design Design teamster to come up with some guidelines. Graham Stafford drew the short straw . . .

DESIGN DESIGN GAME DESIGN

Designing a game can be a very complex task, and this piece can only give a rough outline of the task involved. Don't take what I say as gospel, I'm just showing you one way of approaching the task. There are a number of things to bear in mind when tackling the problem. Don't be narrow minded in your thoughts — just because it hasn't been done doesn't mean it can't be done. Remember, across the whole spectrum of decisions you must make: a good original idea is usually much better than an old one.

Sorry, but there are two major restrictions to game design that apply when dealing with any computer: available memory size and speed (or, to put it in Des Des lingo, Space and Waft). Be realistic in your estimations of the memory required by your game. A brief ferret around the games currently available should give you some notion of the amount of memory you can allow yourself for sprite storage and map layouts. As for waft, sorry SPEED, the speed of a game is largely dependent on the amount of memory you have to wang about the place (oops! WANG: Des Desonian for 'move'), as detection of collisions and such stuff doesn't take up that much time. When I say moving memory this includes drawing sprites and/or lines, scrolling and all such activities.

Bear in mind that masking sprites uses up at least twice as much time, usually far more in the case of 3D games, and also the technique uses twice as much memory to store the pictures. Again, have a quick look at the games around at the moment to get some idea. Remember, try not to limit your horizons too much, but don't go silly. There is no way on Earth you can move a pink banana half the size of the screen about without flicker, nor could it be done at any great speed on the likes of the Spectrum. The problem is not pink bananas, it's BIG pink bananas that cause trouble.

Okay, now we know the restrictions within which we are working, I shall pontificate about the main decisions you will have to make.

GAME TYPE

By this I mean Arcade or Adventure. These are not as black and white as they used to be, but you must decide whether the game relies mainly on reflexes (arcade), or the old grey cells working overtime (adventure). A careful mix of both seems to be the most popular, especially if the adventure side of things is very subtle, tactics being the name of the game, not puzzles.

Way of the Exploding Fist ***is a good example of a game where tactics play an important part. At the other end of the grey scale, the Gargoyle (Hello Ted, Hi Greg !)*** *Tir Na Nog* ***type games are good examples of arcadish (very 'ish') games wot require much thinking about.***

The game type is probably the first decision you will make, and will greatly influence the other decisions you have to get involved in during the design process.

GRAPHIC REPRESENTATION

Big bit of jargon meaning 'Wots it going to look like?'. A very important part of a game these days, some would say unfortunately big, so time spent here is worthwhile. You must decide whether to Sprite or not to Sprite, to Mask or not to Mask and finally to 3D or not to 3D. Of course there's more to it than that, and things will be swayed be the rest of your game definition. Quite often it is the graphic technique used which determines the rest of the game. I mean, can you imagine trying to play *Knight Lore* ***without the 'Filmation' (really trendy name that!)***

GRAPHIC TECHNIQUE

The graphic technique used can also vastly improve what would otherwise be a dull game. For example, take *Highway Encounter*, ***a favourite of mine for quite a while, and imagine it done without the 3D masking graphics. Seen from above the game would lose much of its appeal. To help you decide I shall outline the pros and cons of each system used so far:***

VECTOR GRAPHICS (lines)

FOR: ***Done Brattelesque they are very fast indeed.***

AGAINST: ***Some say the representation of the objects is a bit vague. (I can't because Simon would do something violent to me.)***

PLANAR (flat) SPRITES

FOR: ***Fast and can be reasonably pretty.***

AGAINST: ***Difficult to gain perspective (may not apply), overlapping objects are usually messy.***

MASKED SPRITES

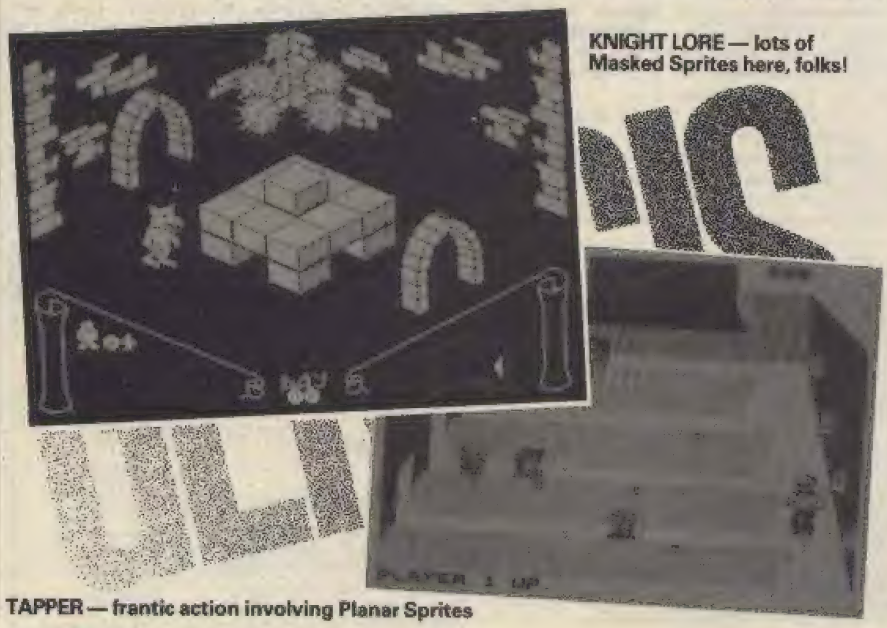
FOR: ***By far the most realistic way of representing a solid object.***

AGAINST: ***Usually slow compared to other forms of graphics.***

Here are a few examples of games that incorporate the above type of graphics

Without 3D, Vector
Can't think of one!!!
Planar Sprite
Jetpac and millions of others.
Masked Sprite
Herbert's Dummy Run
With 3D, Vector
Dark Star (GTE), Starstrike, Starion, Elite.
Planar Sprite
Tapper, Match Day.
Masked Sprite
Knight Lore ***series,*** *Fairlight, Sweevo's* ***and*** *Fatman* ***(I'm sure Ocean think it's called*** *Batman)*

The *Tir Na Nog* ***series is an interesting example of combining a couple of graphic techniques. Remember, there are various ways to approach each of the above techniques and they are only given as guidelines, not rules.***



KNIGHT LORE — lots of Masked Sprites here, folks!

TAPPER — frantic action involving Planar Sprites

SCREEN LAYOUT

Do you want text windows, possibly scrolling, icons (good one that, well in with reviewing types), pretty pictures and/or backdrops? In this category the memory, not the speed is the limiting factor. A decent sketch of the screen layout(s) is almost essential for the purposes of judging the competition and should form the basis of your entry.

PLOT

The real killer! The plot can really make or break a game, as it is the bit that ties all the other things your game does together. Included in the plot is the overall aim of the game, and all those strange and intricate puzzles (if you want them). For the purposes of this competition, only a brief outline of the plot will be necessary. Don't send us any maps, stories or any such like, but if you have them, tell us in your entry as we may ask for them at a later date. What we really do need to know is the setting, the objective and the character(s) involved. To sum up, what we want from
WAKE UP YOU LOT THIS IS THE IMPORTANT BIT!!!!
you is:

1) A BRIEF description of the plot, including the objective and any other essential bits
2) A screen layout, labelled if possible, with a brief description of what does what, where, when, why, how often and in what colour.
3) An idea of what type of graphic representation of your 'world' you intend to use. You may like to add to the above description of the game, but we don't want it just yet as we'd like to be able to see over the top of the paper work when judging this competition.

If you do create some extra bumph, might I suggest such things as sketches of a few of the objects and characters in your game, devising a few puzzles or possibly do a map if you are working on a mappable game. Things such as NOISES (never our strong point that, Simon doesn't like them, and I object to spending more than an evening on them!) and the front-end are best left till last as they are time consuming and far less important than screen layouts and so on.

So there you have it. Noddy's Guide to Game Design. All that remains now is to wish you luck and ask you to remember that the Z80 has only got 40 legs.
best wishes, **Graham**

Hello ? Finished Graham? Yes? O.K. all I want to say is good luck, and ask why I always end up typing Graham's letters to CRASH into my Word-pro!
Best wishes you lot, **Psi**

There's a lot involved in getting people to take notice of your latest computer game. It takes more than a few advertisements in the computer magazines backed up by the odd poster for shopkeepers to put on display, as DOMARK have proved . . .

DOMARKETTING A GAME

When it came to launching EUREKA, an adventure game, DOMARK dipped into their corporate pocket and came up with £25,000. Not £25,000 to spend on adverts, badges, stickers and the like, but £25,000 to put in a suitcase and give away to the first person to complete the game!

As you might imagine, twenty five thousand smackeroonies in a suitcase, just waiting to be picked up, caught the attention of the national press as well as the eye of computer magazine editors. On telly, News at Ten and Blue Peter, amongst other programmes, covered EUREKA and DOMARK actually took the loot — with a suitably burly security guard — along to the 1984 Personal Computer World Show for all to see.

In the end, a lad by the name of Matthew Woodley won the race to complete EUREKA, and was duly rewarded with a giant cheque.

With Bond, James Bond, as the star of a computer game, Domark had a real hot property with A VIEW TO A KILL. Using their power and influence with the makers of the film, Domark arranged for the game to be launched at Pinewood Studios and they showed the film to the assembled mass of Press People two weeks before the Royal Premiere.

Part of the evening's entertainment was going to be the arrival of a helicopter, which was scheduled to land in pure Bond Style to deliver copies of the game. Sadly, the heavens opened and the whole studio complex disappeared under a deluge. The helicopter pilot decided that he was staying firmly on the ground!

One or two people got a little weeny bit cross about some of the publicity that surrounded the launch of FRIDAY 13th — as Lloyd will testify, the Forum pages saw quite a bit of action a few months ago on the FRIDAY 13th front.

Each cassette box of the game contained a couple of blood capsules in best joke shop tradition, and an audio quiz on the tape featured sound effects from the BBC archives and offered the chance to win a prize. The game was launched in the cellar of one of the oldest restaurants in London — The Olde Cheshire Cheese in Fleet Street. The atmosphere was distinctly eerie, as the cellar was decked out with cobwebs, bats and spiders for the occasion when suddenly . . .
CRASH!
Dominic Wheatley, Domark's joint Managing Director burst through a solid doorway wearing a blue boiler suit and holding a meat cleaver. Eeek! went the assembled journalists. An occasion they remembered!

When they launched GLADIATOR, a combat game with a difference, the Domark team were scratching their heads a little for a suitable promotional idea. The game was set in Roman Times, back in the days when they chucked the odd Christian to the lions on a Saturday afternoon and Legionaries stumped around the place invading Europe and the like.

Not wishing to go over the top, and hire the entire cast from Ben Hur, Domark settled for some very tasteful presentation swords made by Wilkinson Sword which they had specially engraved and gave away as competition prizes. Anyone who complete the game, and wins freedom for the slave who stars in the program, is entitled to a Certificate of Freedom, available by post . . .

Naturally, The Designer of the winning game will be invited along to all the launch events — quite what form they will take depends very much on the nature, scenario and title of the finished game. The Designer is also going to be asked to help come up with some fun ideas to promote the game — remember, the more copies it sells, the bigger the prizipoos to the winner!

SO YOU THINK YOU'RE A BIT OF A RAT, EH?

50 Copies of CCS's DESERT RATS to be won!

It's never much fun fighting a war — far better to enter into combat on the screen of your Spectrum. That way, no-one need get hurt.

The Desert Rats had a bit of a hard time of it, one way and another during the Second World War, but they came out if it all quite well in the end. Which is more than can be said of your humble Competition Minion as he wages (wages! wot dey?) daily campaign inside CRASH Towers, fighting off all the divisions of people who think he should be doing even MORE work.

One day I'll get an Assistant Minion for ever and ever, and then I'll become a real Broom-cupboard General, planning competition writing campaigns and bombarding my personal minion with competition entries that need to be judged while I nestle safe and sound in my cleaning equipment bunker. But enough of this idle fantasising, on with the competition.

Crash Competition

Scratch your head, answer the quessies

1) Who wrote DESERT RATS?

2) Which British Armoured Division was known as THE DESERT RATS?
a) 1st
b) 7th
c) 10th

3) On the instructions of Winston Churchill, four British Divisions were transferred from Alexandria to where?

4) Which of the following battles were fought between the German and British forces?
a) Operation Crusader
b) Operation Compass
c) Bede Fomm
d) Battle of Knightsbridge
e) Battle of Gazala

5) In which city were the British garrisons besieged by Axis forces throughout the campaign?
a) Bardia
b) Tobruk
c) Gazala
d) Benghazi

6) How many mines were laid at El Alamein?
a) 100,000
b) 200,000
c) 400,000
d) 500,000

7) Which General was in command at El Alamein and in the Market Garden Operation (Arnhem)?

8) Which Panzer Divisions were involved in the Battle of Gazala?
a) 8th
b) 10th
c) 15th
d) 21st

9) Which British Corps was in the Battle of El Alamein and formed part of the Garden Forces at Arnhem?
a) XIII Corps
b) XX Corps
c) XXX Corps

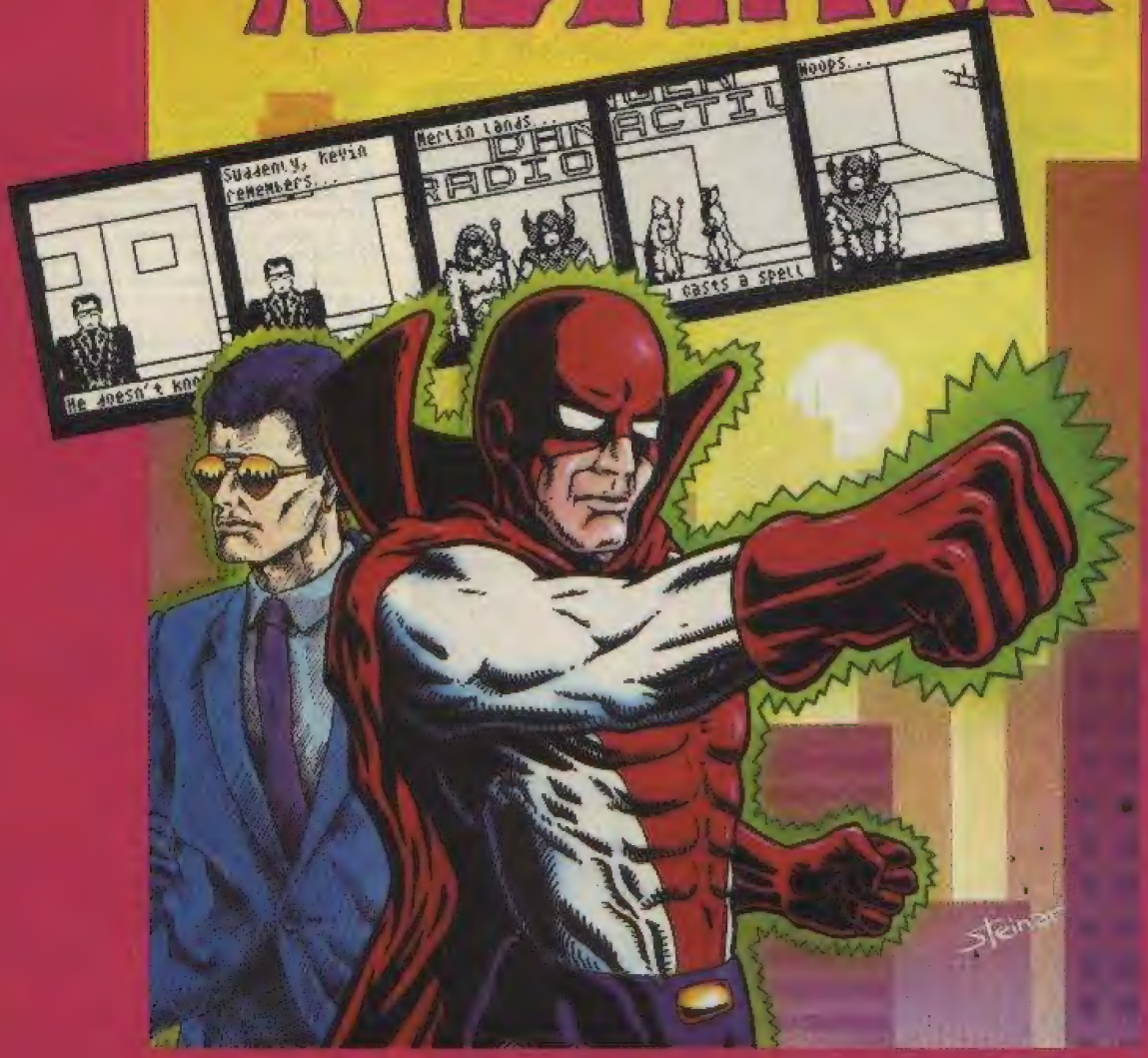
10 What was the name of the German Field Marshall at El Alamein?

and get a pressie!

Mr Masterson, Mancunian Strategy Reviewer Extraordinaire has awarded the 128K version of CCS's game DESERT RATS a CRASH SMASH this issue. So if you read his review carefully a few tips and hints should be found which will be helpful when it comes to answering the questions set out here.

If you're still stuck for the odd answer, then it's time to nip down to the library and get a bit of an education about a corner of World War II! Never let it be said that CRASH doesn't help improve the minds of its readers . . . First fifty entries pulled out of the **DESERT RATS COMPETITION Helmet in PO BOX 10, Ludlow, Shropshire, SY8 1DB** on 26th June this year win their senders a copy of DESERT RATS. Mark your entries neatly on the back of a postcard or envelope not forgetting to add your name and address and whether you'd like the 48K or 128K version of the game if you win.

REDHAWK



Shout "KWAH" and become REDHAWK, superhero extraordinaire in this original graphic comic strip.
Use all your superhuman skills to battle against the arch-villains. Keep a careful check on your popularity rating, your energy level and your wallet.
Remember – je ne say KWAH!
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SAY "KWAH"

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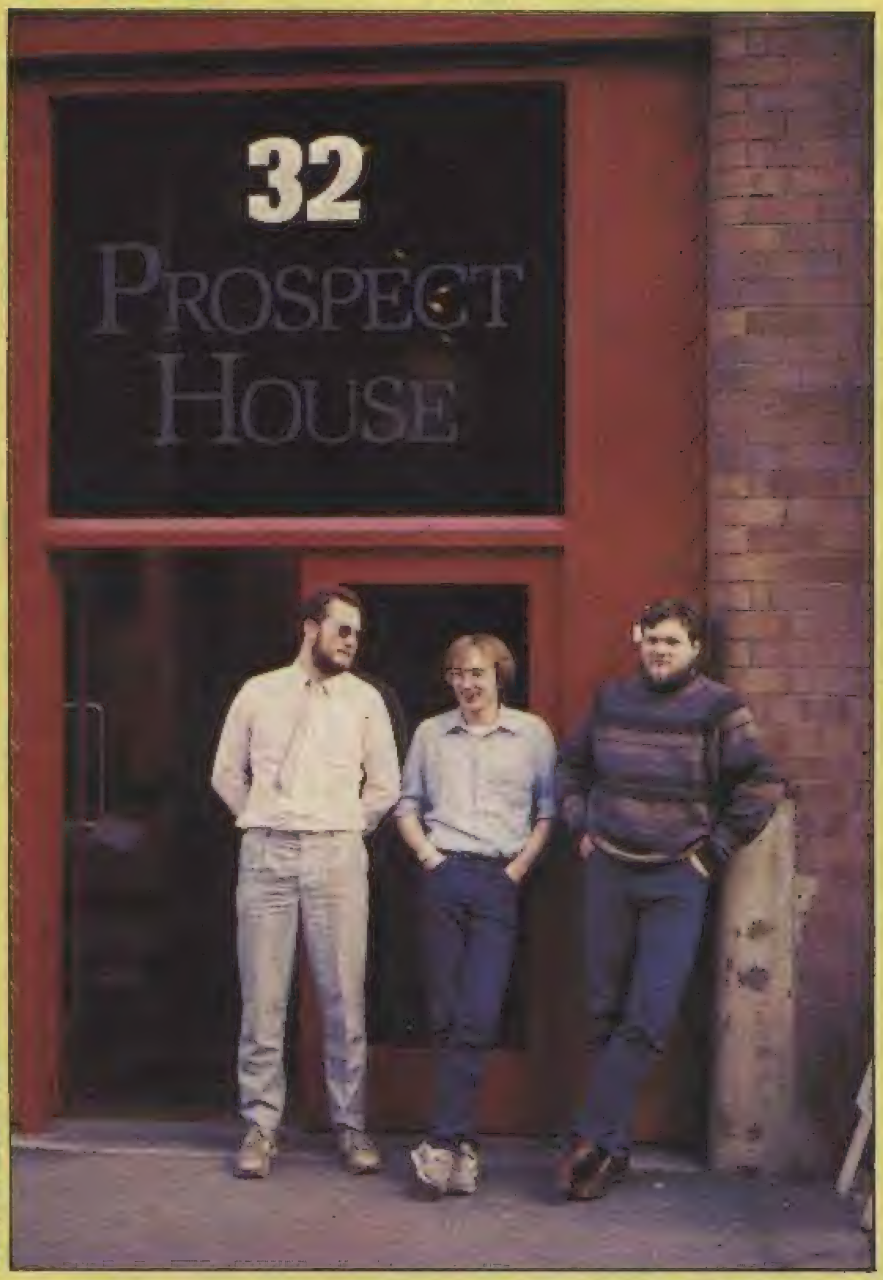
HANNAH SMITH treks off to Leeds in search of the Masters of 3D . . .

THE THREE DIMENSIONAL TRIO



PHOTOS: Graeme Kidd

Our visit to REALTIME GAMES SOFTWARE coincided nicely with their second anniversary. Realtime as born on May 8th 1984 in the middle of the founding members' Final Examinations at Leeds University. From that slightly unlikely beginning, the company formed by Ian Oliver, Andrew Onions and Graeme Baird has gone on to become the market leader in the field of 3D games on the Spectrum.

Working from an office a few minutes walk from Leeds City Centre, the triumvirate were taking a breather when we arrived, having just launched their third Spectrum game, STARSTRIKE II. Not that the central heating boiler nestling in an anteroom to the programming chamber exactly encourages breathers — the temperature in the Realtime room usually approaches that of a Turkish Bath, and it wasn't long before I began to regret putting on my Ludlow Vest before setting out that morning.

The trio formed at Leeds University — probably at the college bar, rather in a lecture room on the Computer Science course they were following. They soon came to the decision that they didn't want to work for anyone else after graduating, but had a fairly strong idea that wherever their future lay it was together, and roughly in the direction of computer games.

Tank Duel was their first release and Realtime burst into existence, earning their first CRASH review in the August 1984 issue. Well, they weren't called Realtime at the time of the launch — in fact they weren't called anything in particular so vague were their plans. In true student style, *Tank Duel* was actually completed while Ian, Andrew, and Graeme were sitting their Finals at university. It was written because it was a project that they were interested in, and was sparked off by their healthy interest in the development of three dimensional games.

HIGH SPEED 3D

3D Tank Duel was previewed at the ZX Microfair in April 1984 and was soon pronounced by those in the know as a superior version of the *Battle Zone* clones which started with **Artic**'s *3D Combat Zone* and continued with **Crystal**'s *Rommel's Revenge*. It was certainly the fastest and most colourful 3D game on the Spectrum, at a time when 3D games in general were fairly thin on the ground.

Realtime's studenty approach to work is still very evident in their company philosophy. Driven by enthusiasm rather than accountant's margins, it is almost as if the games they write are ultimately produced for their own entertainment, although *Starstrike* and the sequel, *Starstrike 2* were more of a commercial venture than *Tank Duel* ever was.

Eight months after *Tank Duel*, Realtime's *Starstrike* heralded a new generation of wireframe 3D games for the Spectrum. With its fast-moving action and colourful graphics the game was state of the art and, predictably, a success. The team won their first CRASH Smash in December 1984. By then, Realtimes' future in the computer games market looked promising...

LOW PROFILE

It was low profile time on the Realtime front after the release of *Starstrike*. The trio were spotted from time to time, beer mugs in hand, at a variety of computer shows but little news about their next game was available. They were not basking in well-earned glory or lounging around their Leeds-based office. Well, not all of the time anyway. Plans were already being made for *Starstrike 2*. Not wishing to appear rude, I did hint that that their third Spectrum game was just a teeny bit late in coming onto the market: it was soon pointed out that very few people realise just how many hard sums and hours of work lie behind the routines that set such complicated 3D shapes spinning and whirling on the Spectrum screen. Each level of the game

is so different to the preceeding one that every section was like a separate game to write. "People tend to look at games simply as pretty colours and clever graphics," complained Graeme as we all stumbled out of an Italian restaurant, blinking like moles at the sudden change in light. Back at base, a flow chart on the office wall was called upon to support the argument. A quick glimpse of the convoluted inter-relationships between the sections of the game was enough to dispel any doubts about the complexity of the programming that lies behind it. "We're also very lazy," added Graeme, his tongue very firmly in his cheek.

Realtime were one of the first software houses to emerge onto the market, yet they have decided to remain small. To date they have only produced three games for the Spectrum. Had they not been tempted to become a facilities house along the lines of Denton Designs who produce games to contract, for others to publish? Definitely not, said Andrew Onions. Realtime are involved in some conversion work at the moment — for themselves.

Filed under E in their filing cabinet, lurks an Enterprise. A while ago, they agreed to convert games to run on this machine, quoting a price and a three week turn-around. After a slow start, they managed to crack the three week deadline, and are now capable of knocking the bulk of an Enterprise a conversion out in a few days, spending a week on the music to round the project off. Getting paid has proved a little problematic, and all three now adamantly insist that this line of work is not one they are keen to pursue. The Enterprise is about to be moved to the drawer headed T in the cabinet — they've found it makes an excellent tray, and it's more often seen in the corridor, keyboard side down, supporting three cuppas on their way to the programming zone.

It's going to be in-house conversions from now on — work had just started on the Amstrad version of *Starstrike 2*, and we were treated to a demo screen or two. Amstrad owners should be in for a treat any day now.

PITFALLS

All their success with 3D games on the Spectrum has not been without its pitfalls. Being such a small company in the modern, commercialised computer games world has its handicaps. Certain large chain stores are only now accepting *Starstrike II* on their shelves, having refused to handle its predecessor. And a few hairy financial moments were experienced before its release, when large sums of money had been committed to advertising, leaving very little cash to live on while the game was finished off. Student experience was undeniably an asset during confrontations with Mr. Bank Manager at this stage.

So far, all Realtime's Spectrum games have been in 3D. I tried to prise the conversation away from drunken student parties and general crazy, wacky student stunts to find out why this was. "It's mainly Graeme's idea," said Andrew, carefully deflecting the question to another part of the room. It's clear that 3D games represent a challenge to the trio — they seek to improve their mastery of the techniques involved with each subsequent release.

"When we start writing a game we tend to go out and buy copies of similar games that are available, so we can see what the competition is like. Then we try to think of ways we can improve on what's already on the market," Andrew had told me earlier over a seafood pancake. Certainly *Starstrike II* is more adventurous than any other 3D game currently on release. But how much further forward can 3D games realistically go? The stage is fast being reached where to get just a tiny improvement on the 3D display, a vast amount of additional memory is required. It's become a straight play-off between speed and memory space.

Has the point been reached where 3D games can go no further? Nobody knew, but it seemed likely, they agreed. I got the feeling, however, that if I'd have asked them the same question just after *Tank Duel* had been written I may have got a similar answer. When it comes to reaching the limits on 3D Spectrum games, Realtime have stubbornly insisted on proving everybody wrong. So what plans are afoot for future Realtime games? All answers to this question were tactfully avoided so I bided my time and approached the subject two bottles of wine later.

MAKING PLANS

Realtime *hasch*, sorry, has, two games in the planning. One of these will be three dimensional and should develop gameplay more. Lots of hard thinking lies ahead. The scenario is likely to involve a lead character marooned on a planet who has to collect various objects in order to find a way off. This will undoubtably all change in the fullness of time — maybe a CRASH preview will help the process along: we got things a little mixed up in the piece previewing the first *Starstrike*, but the team played along . . .

The workload behind Realtime, like the equity, is split equally between Andrew, Graeme and Ian in true co-operative fashion although Graeme and Ian tend to stick to the programming side of things leaving Andrew Onions to handle the businessy bits. This invariably leads to mock arguments between the three. Ian and Graeme criticise Andrew's commercial exploits, while generally leaving him to get on with it. If he gets things right, praise is not forthcoming. They all have their personal specialities although none of these extend to screen and inlay artwork. Andrew Onions, for instance, specialises in what he describes as the 'twiddly bits': sprites and that sort of thing.

One of the main reasons why the games take so long to produce is because a lot of time is spent hanging around waiting for each member of the team to finish his own individual section, so that the game can eventually be pulled together. The screen graphics side of things is being more strongly developed at the moment and there is the possibility that a fourth, artistically inclined person may be hired.

So, what of plans for a *Starstrike III* to complete a trilogy? (everyone else seems to be doing trilogies.) Reaction to this question was met with a variety of adamant denials and "well . . . I don't know's". The general consensus of opinion was that a follow up to *Starstrike II* was highly unlikely — although the *Starstrike* games have been very successful, the 3D Masters are not overly keen to do a repeat performance and are generally sick of the sight of them. But then again . . . As usual, nothing definite was divulged.

KLUDGING AWAY

Although Realtime is predominantly a software company, they do dabble in the hardware side of things. While we were at their office we witnessed Ian Oliver doing barbaric things with a soldering iron. He was trying to solve a problem. A while ago, he came up with a wizard programming wheeze, that allows programmers to take advantage of a quirk in the 48K Spectrum's make up to speed up certain bits of code. Being a generous fellow, he passed his tip around the computer industry, and lots of programmers used it. When Sinclair made the 128K Spectrum, they changed its internals round a bit, and now 48K programs that exploit this little programming wrinkle won't run in 48K mode on the 128 if a Kempston interface is in action. (A full explanation of the problem appears in this month's TECH TIPS.) Ian's confident he can Kludge the 128K Spectrum with a handful of resistors soldered onto the edge connector, but he didn't have a lot of luck while we watching him.

And so it was time to wend our merry way back to Ludlow through the spectacular scenery of West Yorkshire. Realtime are undoubtably the best when it comes to writing 3D Spectrum games and as we pottered back towards Shropshire I was left wondering what their next release would really be. Would there be a *Starstrike III* after all or would the next game from Realtime incorporate the cunning vertical scrolling we had previewed on a beat-up black and white monitor that day? Perhaps there'll be a 128K version of *Starstrike II* . . . They could certainly make use of the extra memory.

Andrew Onions, Ian Oliver and Graeme Baird are sensible fellows. They didn't want to bother themselves with answering boring questions about the Software Industry. They were far more enthusiastic to relate the rip-snorting stories of their student days, and tease Ian about losing an argument with a dry stone wall in the company car — he still had the black eyes to prove he lost. In their position, I think I would have been too.

Ian Oliver wrestles with soldering iron and edge connector, to fix a Kempston/ 128 bug

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FIFTY COPIES OF OCEAN'S BATMAN TO BE WON

Search for the **BOLD** words in the Batsquare, ring them round and you could win a prize — your very own copy of BATMAN!

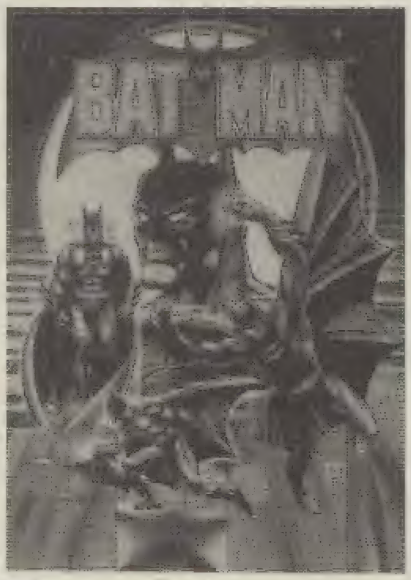
In **OCEAN**'s new game, **BATMAN** has to **RESCUE ROBIN** from the clutches of evil villains, **JOKER** and **RIDDLER**. Sliding down the Bat **POLE** into the bat **CAVE**, the **CAPED SUPERHERO** has to **FIND** the various **BITS** of Bat Equipment that he needs to succeed.

There are one hundred and fifty **ROOMS** in the Batcave, and lots of them are full of **NASTIES**, contact with which sap our hero's strength.

Last month, the game was awarded a **CRASH SMASH** and now here's your **CHANCE** to **WIN** your very own copy, courtesy of the nice people in Chateau Ocean.

A Competition **MINION**'s life is not an easy one, so please make sure you get your entries in to the Batman Competition as **SOON** as you can — or at the very latest by June 26th so I've got lots of **TIME** to work out who has won. **FIFTY** copies of the game are on offer, so get moving folks!

WIN



Okay. Found all twenty two words in the wordsquare now? Good. Stop looking then. Now pop your entry into an envelope, making sure you've filled in your name and address and send it off to BATMAN COMPETITION, PO Box 10, Ludlow, Shropshire, SY8 1DB to arrive by 26th June. Good luck!

Crash Competition

BATWORDSEARCH PUZZLE

H	C	H	A	N	C	E	T	R	E	K	O	J
B	Y	S	U	P	E	R	H	E	R	O	O	N
L	I	Y	T	F	I	F	A	I	E	D	Z	O
R	H	S	E	I	T	S	A	N	M	N	A	O
E	L	N	P	L	R	E	L	D	D	I	R	S
S	M	A	S	H	O	W	H	L	S	F	G	O
C	A	X	K	B	B	P	A	D	E	P	A	C
U	W	N	U	T	I	M	E	O	A	T	V	R
E	N	R	A	F	N	C	R	O	O	M	S	A
A	H	G	D	M	O	E	V	A	C	J	F	S
Q	D	K	K	S	T	I	B	N	M	E	N	H
N	O	I	N	I	M	A	A	U	I	F	A	C
N	M	P	E	N	Q	J	B	Z	O	W	I	N

NAME .....

ADDRESS .....

.....

POST CODE .....

CRASH COURSE

by Rosetta McLeod

EXAM FEVER!

Revision software for examinations is being produced by an increasing number of publishers. Hill MacGibbon and Pan Books have now got together to issue a set of six Course Tutor packages covering Physics, Biology, Chemistry, Maths, French and Economics at 'O' Level. Each attractively presented package contains a Pan Study Aid Book, a Student Guide and two cassettes — *Diagnostic Tests* software and *Learning Modules*.

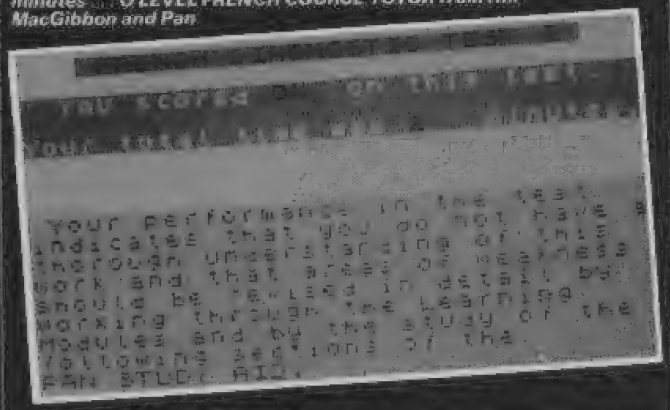
A core syllabus is covered in each subject, selected from topics covered by the majority of examining boards. This may cause students to become confused about which areas of the subject covered by the packages are relevant to their particular syllabus — but teachers should be able to clarify matters.

The Student Guide gives some useful tips on how to get down to serious studying and contains instructions on how and when to administer the diagnostic tests, together with the test papers themselves. These tests are extremely well constructed with the computer monitoring the time taken by the candidate to answer each question. By reselecting a question number, it is possible to change or revise an answer, and the 'next question' key can be selected to skip past a question if need be. Each test has a target time, but this is only for guidance, and the computer tells you at the end how well you would have done if you had stopped at the target time.

At the end of the test, 3 options appear for analysing the mark obtained. The full analysis option gives the correct answer, together with the marks you were awarded and the total number of marks available. The time analysis is shown by means of a bar graph of the time actually taken compared with the target time. Questions answered correctly have the time bar displayed in one colour, questions incorrectly answered in another. The final option gives a full written report of performance, including suggestions for further work. The overall percentage mark is shown at the top of the screen, together with the number of minutes taken. If the target time has been exceeded, the screen gives the percentage score that would have been attained if the test had been stopped at the target time.

These packages are highly recommended as comprehensive and worthwhile study aids.

Cameron's not so bright when it comes to parlaying Francais! He's scored a measly 0% AND it took him two minutes ... O LEVEL FRENCH COURSE TUTOR from Hill MacGibbon and Pan



FRENCH

The six *Diagnostic Tests* in the *French Course Tutor* package cover Verbs and Tenses, Irregular Verbs, The Perfect Tense, Making Things Agree, Vocabulary 1, and Vocabulary 2/Comprehension. While the chosen test is loading, the screen display lists the time it will take, and the equipment required — the test paper, writing paper for recording the answers, pencils and a watch or clock. Some of the questions in the papers require the full answers to be typed in, whereas others are multiple choice.

The screen clearly informs the student which keys to press in order to type in the French accents. The *Learning Modules* program offers twelve topics, covering tenses, adjectives and agreements, negatives and interrogatives, prepositions, pronouns and possessives, houses and homes, time, shopping and food, and personal information. For all of the options, the screen is divided into three: the top half is used for pictures and for English phrases, while the left hand side of the bottom half is the workspace where the French phrase has to be completed, and the right hand side is reserved for hints.

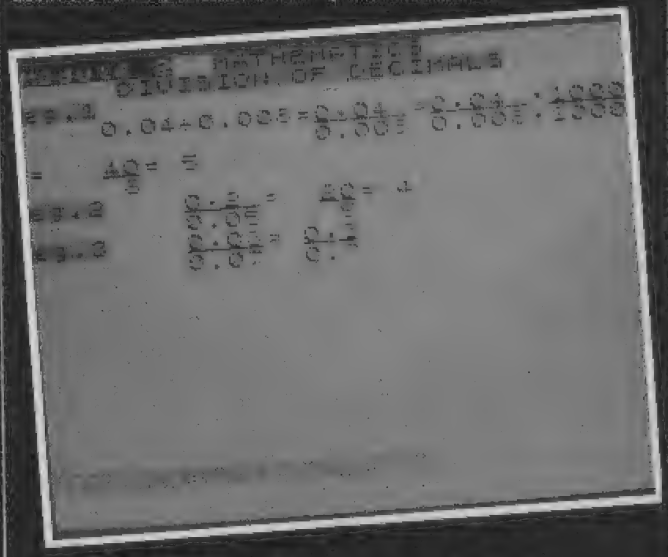
I was extremely impressed with the amount covered in this package and with the way the material is presented. One unfortunate bug, though, does occur in the adjective program — if the correct adjective 'chers' is inserted in the phrase 'Les melons sont plus . . . que les oranges', the answer is rejected and the hints inform you that the correct answer is 'chers'!

MATHS

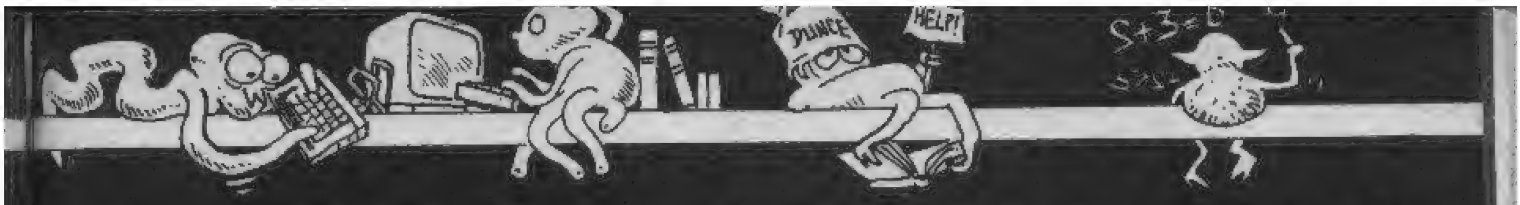
For the *Diagnostic Tests*, the core mathematics syllabus has been divided into six main topic areas: Arithmetic, Algebra, Geometry and Trigonometry, Graphs, Probability and Statistics and Matrices and Transformations. A calculator is allowed for all the tests apart from arithmetic.

The *Learning Module* programs cover a variety of 30 different topics ranging from multiplication and division of decimals to frequencies, 3-dimensional trigonometry, and determinant and inverse of matrices. Each section provides the student with the useful option of selecting Notes before attempting to answer the questions, and the examples are then worked out step-by-step on the screen with comments to clarify the various stages.

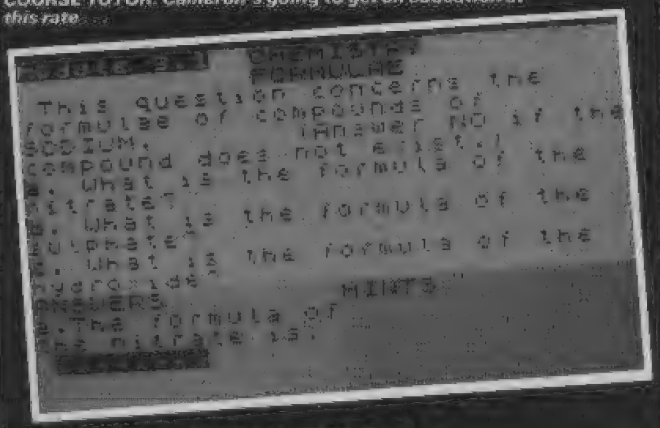
I haven't done any serious maths for many years but I found things coming back to me after working through the Notes. The Study Aids booklet too, is an excellent source of information, and the package as a whole represents a powerful interactive revision aid.



Hard(ish) sums in the maths package on offer for O Level students. That's MATHS COURSE TUTOR for you.



Taking a peek at Chemical Formulae in the CHEMISTRY COURSE TUTOR. Cameron's going to get an education at this rate . . .

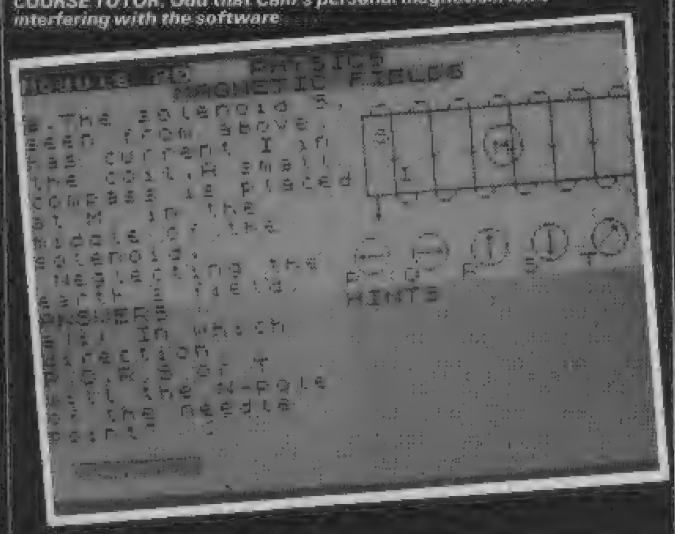


CHEMISTRY

The six main topic areas covered in the *Diagnostic Tests* are: Kinetic Theory, Atomic Structure, Bonding and the Periodic Table — salts, purification, acids, bases, metals and their compounds; Activity Series — electrolysis, reaction rates, redox reactions and the chemical industry; The Air — gas preparations, and the chemistry of sulphur, chlorine, hydrogen and oxygen; Mole Calculations — carbon and nitrogen, organic chemistry, fuels and energy.

The *Study Aid* book goes over all these topics in detail, while the 30 sections in the *Learning Modules* programs break the information into manageable units. The Hints are particularly good in this package, and if the wrong answer is typed in a helpful comment appears and you are also directed towards the relevant pages in the *Study Aid* book.

Magnetic Fields are under discussion in the PHYSICS COURSE TUTOR. Odd that Cam's personal magnetism isn't interfering with the software . . .



PHYSICS

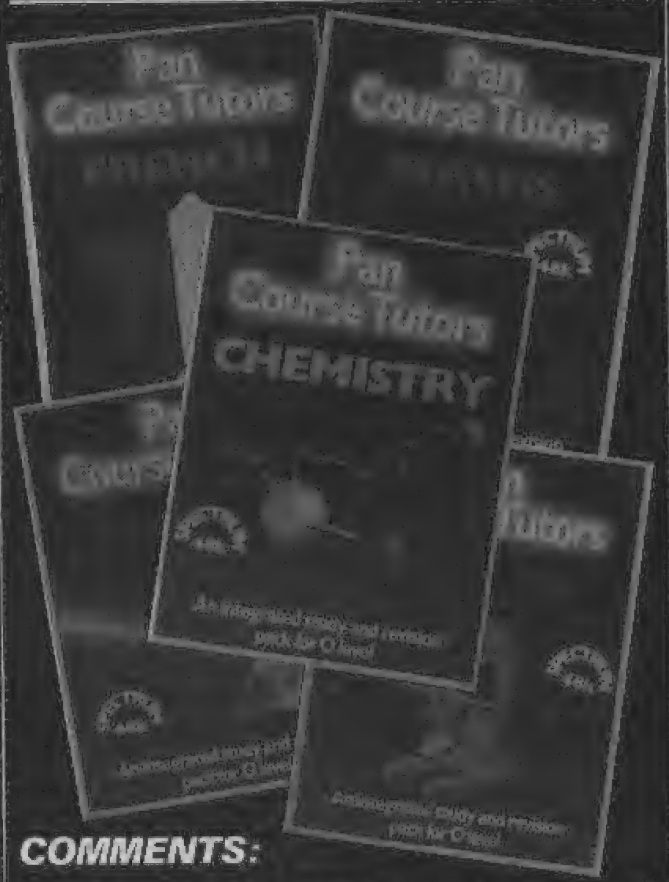
Mechanics, Heat, Optics, Waves and Sound, Electricity, and Atomic Physics are the topic areas covered in the *Diagnostic Tests*. The *Learning Module* programs are subdivided into 23 sections beginning with Equations of Motion and ending with Radioactivity. The depth of knowledge covered in this package is quite impressive, with the questions being particularly well-constructed. The *Study Aids* booklet is well-written, with the information presented in a clear and concise manner. Again, the Hints section of the screen display refers the user to the appropriate page in the booklet for help. Physics is now such a vast subject that no exam syllabus covers more than a small part of it. A student using this package would certainly need the advice of a teacher as to the sections which are relevant for the particular course being followed. The section *Preparing for the Examination* in the booklet, which gives helpful tips on tackling a Physics exam, should be essential reading.

BIOLOGY

A very nice touch in the *Study Aids* booklet for this package is the inclusion of a short Glossary at the start of each chapter, and a list of key words at the end. The chapter on Transport for example, begins by defining Translocation and Transpiration, while blood, lymphocyte, fibrin and ions are some of the key words listed at the end.

In this package, five main topic areas are tested: The Cell and Transport; Nutrition and Respiration; Genetics and Ecology; Movement and Co-ordination and Reproduction, Excretion and Temperature Regulation. This package is possibly the best of them all in the way it relates the information in the booklet to the questions which appear on the screen. In the first *Learning Module* for instance, the top part of the screen display is divided into two, with the left hand section giving the explanation and referring the student to the relevant pages in the booklet, while the right hand section displays a graph of the information on which the questions are based.

Another particularly useful feature is the information contained in the package on the different types of exam questions the student may have to answer — objective, structured, essay and practical questions, and a helpful explanatory list of the terms commonly used in the questions is also given. Overall, this is an excellent revision aid.



COMMENTS:

For the serious student, these packages represent superb value for money. What they are most definitely not, is a short-cut for the less able. The fact that each *Course Tutor* covers such a wealth of information may cause problems to the student who is unsure about the precise requirements of the exam syllabus being followed, but an approach to the teacher would resolve this problem. The producers of these programs have avoided any temptation to include gimmicks or unnecessary graphics to give them more mass appeal, and a great deal of thought has gone into their preparation. Their main advantage lies in the way the computer is used to test understanding and pinpoint areas of weakness, to provide personal tuition based on the *Diagnostic Test* results, and to give practice in answering examination questions.

As examples of truly interactive learning they are impressive indeed.

5 IN A ROW

Producer: Hill MacGibbon
Retail price: **£6.95**
Age range: **4 to 104 years**
(well, that's what it says!)

5 IN A ROW from Hill MacGibbon. Will Cam win?

Five in a Row is played on a board with 196 positions set out on a 14x14 square, and can be played by up to three players. Each player, in turn, places a counter on the board and the first to achieve 5 in a row (horizontally, vertically or diagonally) is the winner. It sounds easy, but the game represents quite a challenge, and players can also select a 4-in-a-row or a 6-in-a-row option.

There are several ways of placing the counters on the board: the arrow keys can be used to control the cursor or a pair of cursors can be moved along vertical and horizontal axes with the arrow keys. If that's too easy, coordinates may be entered using the arrow keys to increase or decrease the value of the coordinates displayed on the screen. The program on Side A of the cassette is a version in which an unlimited number of counters are available in the game, while the game on Side B imposes a handicap — the number of counters available is limited.

This is a very enjoyable strategy game, which has the flexibility to provide hours of fun.

COMMENTS

Control keys: arrow keys used for all the options of placing the counters on the board.
Keyboard play: very responsive.
Use of colour: bright and clear.
Graphics: simple, but well-organised display of the board.
General rating: a deceptively simple game which is useful in encouraging skills of logical and predictive thinking. Excellent for getting young children to move from their self-centred world towards thinking about what others may do, or for helping older children master the skills of coordinates.

MASTER WORD

Producer: Hill MacGibbon.
Retail price: **£6.95.**
Age range: any age.

Hmm. Cameron's working on some strange MASTER WORDs in this word game.

This is quite a difficult game for guessing hidden words correctly. *Master Word* can be played against the computer or against another player, and the number of letters (up to 6) in the mystery word can be selected. You can also choose whether or not to play against the clock, or to have sound. If the game is played against the computer, it enters a mystery word with the number of letters you have selected — human players can take it in turns to enter the hidden word.

In the game itself, a row of dots is displayed on the screen, one for each letter in the hidden word, and the first player simply has to type in any word of the required length. The computer then tells you the number of correct letters in the right position. Ten guesses are allowed, but it is possible to give up by pressing 1. The computer keeps the score, showing the players' names, the mystery words, the number of guesses taken, and the time taken.

My only criticism is that SPACE is used instead of ENTER to confirm the command typed in, which I found rather irritating.

COMMENTS

Control keys: words typed in the normal way, with SPACE to confirm.
Keyboard play: slightly slow.
Use of colour: clear and bright.
Graphics: limited.
General rating: an enjoyable game for encouraging thinking about letters and words.

ONLY THE BRAVEST FLY....

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New, from the author of Fighter Pilot... a stunningly realistic helicopter simulation that puts you in command of an Apache Advanced Attack helicopter. You will learn to take off, to land, to manoeuvre and locate and destroy enemy tanks using Hellfire anti-tank missiles. You will experience authentic battlefield conditions as you endeavour to carry out your mission and return safely to base.

BY D.K.MARSHALL

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Crash Competition

THE GREENCHOMP COMP

Clocks, T Shirts and Copies of the game to be won

Design a recipe for POPEYE and win! win! win!

Popeye's a very different kinda hero. None of this "wearing your underpants on the outside of your trousers" stuff for HIM, oh dearie, me no. All he's interested in is protectin' Olive Oyl and Biffing Bluto the hairy bad guy.

It's not too surprising that the heroic sailorman quaffs spinach every time he needs a bit of boosted muscle power — it's definitely very good for you. That's why your Mum keeps going on at you to eat up your greens, you see.

But over the years, just ripping the top off can after can of spinach and gulping it down must get a bit boring — let's face it, mouthful after mouthful of unadulterated Greenchomp makes a monotonous diet really — just like an endless diet of fizzy pop, crisps and sweeties gets boring after a while (unless you're Gary Liddon, Foodaholic of this Parish who eats anything that comes within grabbing range, no matter what).

Popeye, the game, first came to light last year; published by DkTronics, it was awarded a CRASH Smash in the September issue. Now Macmillan have acquired the rights to the game, and are re-releasing it — on the Commodore 64 as well as on the Spectrum. And a very jolly game it is too!

To mark the event of the re-launch, the nice Mr Neild (Marketing Big Cheese at MacM's) is offering some very tasty prizes indeed to the winners of this competition. To enter, we'd like you to get into *Chef Celebre* mode and dream up a delicious new dish featuring spinach — a little more imaginative than Spinach on Toast, or Spinach and Chips if you don't mind.

Come up with a really yummy recipe to take the tedium out of spinach straight from the can for old Popeye the Sailorman. Send us you recipe, or a drawing or maybe even a photograph of your culinary creation (but please, NO SPINACH!)

The two most scrumptious spinach recipes on the day of judging will win their creators a Popeye alarm clock, a T shirt and a copy of the game. The next five entries, in order of yumminess win a Popeye wall clock, T Shirt and copy of the game, three more runners up are set to have a T Shirt and copy of the game and then no less than 40 runners up will have to make do with the game on its own.

The day of judgement falls on 26th June for this particular competition, so make sure your entries arrive before that date at **POPEYE THE SAILORMAN COMP, PO Box 10, Ludlow, Shropshire, SY8 1DB** before that date. And if the winning entry looks like it'd be a really good feast, we might just rustle it up and feed it to Mr Liddon to keep him quiet (and healthy) for a while!

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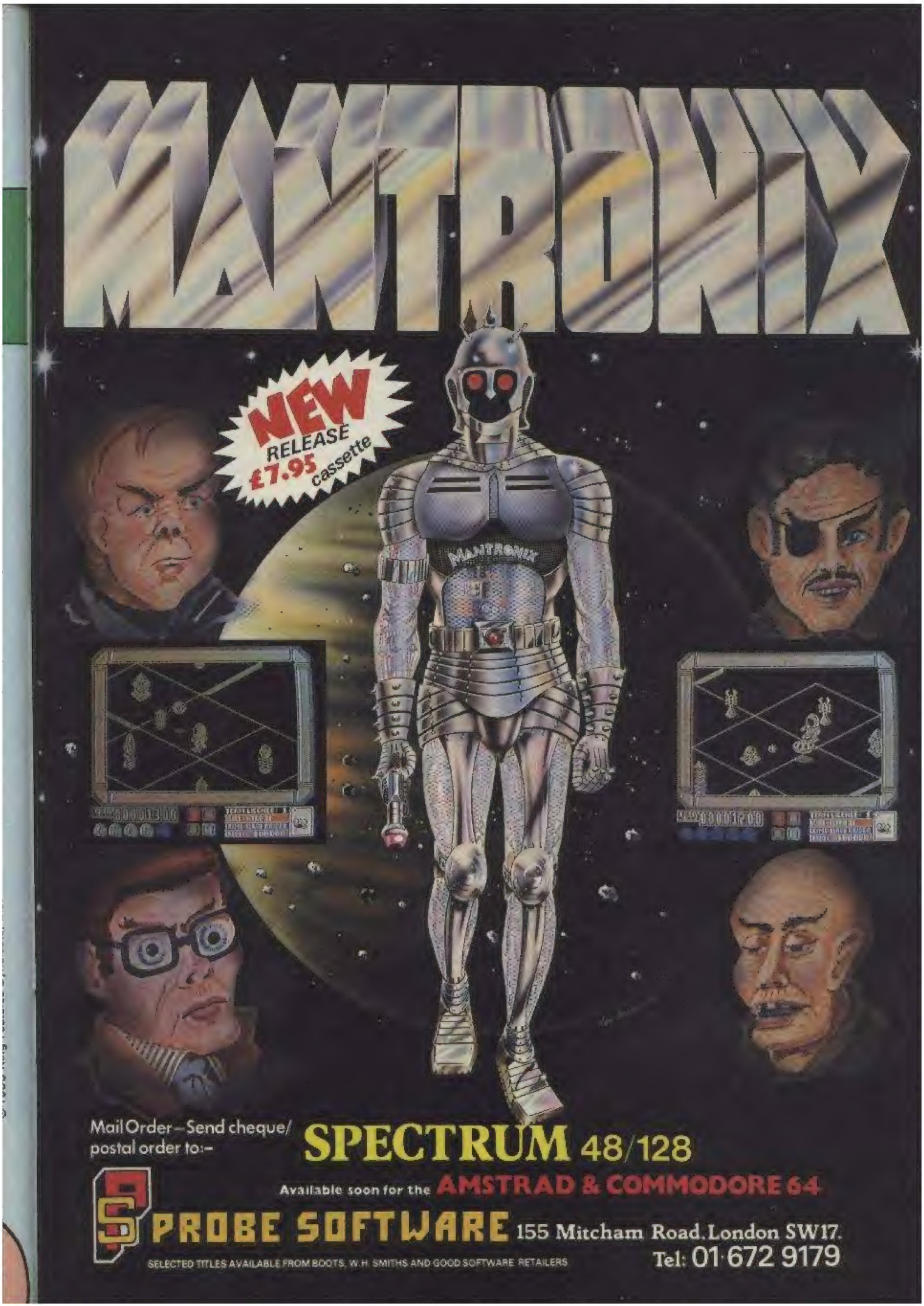
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Hannah Smith's PLAYING TIPS

After many months of sterling work as Chief Tip Merchant, Robin Candy has departed from CRASH Towers for pastures new. Lloyd's feeling a bit glum at the moment — rather like a dog without fleas — as there's no-one to engage in running warfare with, over who gets the Biggest Desk and so on.

Hannah Smith joined the CRASH team last month, and as she has done a wonderful job of covering Graeme Doc Marten Kidd's office floor with bits of paper, broken umbrellas and files, she's been volunteered to take over the PLAYING TIPS. (And sit next to Lloyd, starting next month!) So it's over the the computer world's first and only female tipster. Take it away, Hannah! (and that mess. Pretty please)

This issue's Playing Tips has turned into a bit of a Map Spectacular. There's the first part of a massive map of *Tantalus*, a brand new game from Quicksilva (the original map, made up from ZX Printer screen dumps sellotaped together, is currently covering about half the floorspace up in the CRASH TOWERS Art Garret!) The rest of the map will be printed in the July issue.

The long promised *Saboteur* Map also makes its appearance this month after a delay caused by a slight problem with the typesetting on the competition page yonks ago. Oh, and not forgetting the map of *Cylu* kindly supplied by S.W Freeman of Leicester who wins this month's CARTOGRAPHER OF THE MONTH award (£20 of software) for sending in such a well-produced map. Budding cartographers please note, there's a prizipoos on offer if your map is good enough to print as it stands . . .

Adrian Singh comes out at the winner of the June TOP TIPSTER award, and gets £20 worth of software of his choice for the *Green Beret* POKE that arrived a couple of minutes before these pages had to go to the printers.

With all these maps, there's not much space left this month for wittering on, so let's go straight into the tips:

THE INCREDIBLE SHRINKING FIREMAN

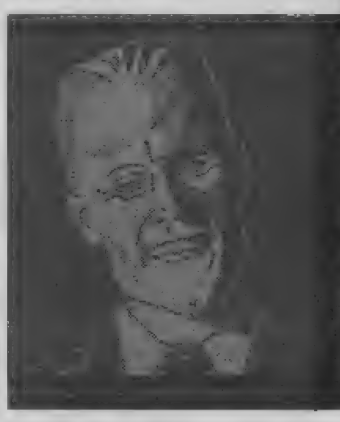
Well, we only reviewed Mastertronic's *Incredible Shrinking Fireman* last month and already someone has written in with a complete solution to the game. There we all were, agonizing over whether Sid would ever be unshrunk and in writes **Mark Desvaux** from Fetcham in Surrey with a complete guide detailing which objects to collect and where to find them. As the game has only been out a short while, I'm not going to give all the secrets away: here's the first half to help you on your way lest you loose sleep about how to unshrink poor, shuffling Sid.

From the start of the game go:
1 screen right, get I.D card
9 screens right, get skeleton key
7 screens right, 1 screen up, 2 screens left, 1 screen up, get set of keys
1 screen down, 2 screens down, drop skeleton keys
1 screen down, 9 screens right, get blue key
1 screen up, get part two of rack
1 screen down, 1 screen left, drop set of keys
3 screens up, get part five of rack
3 screens down, 5 screens left, drop I.D card

WAY OF THE TIGER Unarmed Combat

Thanks to everyone who responded to the appeal for hints on Gremlin Graphics' *Way of the Tiger* — I've been battling hard with it! Here's the way **Damien Rice** of County Tyrone, Northern Ireland gets through the *Unarmed Combat* section. Damien also wants to register a claim for Lloyd's Hall of Slime, as he says he completed the game on 19th April . . .

First Ninja walk towards him and deliver a flying kick followed by a couple of low kicks and then finish him off with middle kicks.
Goblin a couple of middle kicks to begin with and finish him off with low kicks
Spectre a precise flying kick changes the spectre into a goblin. You can then finish him off with the middle kick technique.
Rhino-Man alternate between mid kicks and low kicks. Don't bother attacking his head because it's too well protected.
Second Ninja you have to be quick with this one. Deliver a couple of flying kicks, then middle kicks and finish him off with more flying kicks too
Second Rhino man middle kicks again.
Giant jump towards him and quickly switch to flying kicks. Keep bouncing back and kicking him. With these movements you should only loose one or two Inner Force points.



MAX HEADROOM

Quite a few people have written in saying how easy they found *Max Headroom* to complete, and in case you can't wait for the reward that comes on the other side of the tape, there's a POKE which allows you to access the Mmmax bit without completing the game. If you're still having problems with retrieving Max in the main game, here are a few hints and tips sent in by **Steve Tilbury** from Leighton Buzzard in Bedfordshire:

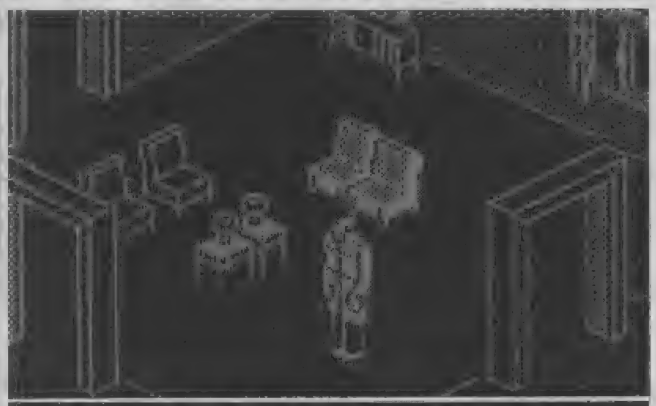
When first using the lift it's a good idea to start lighting up the circuit with the correct digit when the timer reaches 50 as by the time you get it lit up, the timer should reach zero making the lift move straight away. This approach stops you having to refresh the display every time the digit starts to fade away.

When you reach floor 200, Steve advises you to gain access to floors 200 through to 209 as this saves quite a bit of time. Each floor requires you to light up the LED with the last number of the floor to which you want to gain access. Below are the floors with their respective codes:

200 — E : 1, 2, 3, 4, 6
201 — 1 : 5, 7
202 — 2 : 1, 3, 4, 6, 7
203 — 3 : 1, 4, 5, 6, 7
204 — 4 : 2, 5, 6, 7
205 — 5 : 1, 2, 4, 5, 6
206 — 6 : 1, 2, 3, 4, 5, 6
207 — 7 : 1, 5, 7
208 — 8 : 1, 2, 3, 4, 5, 6, 7
209 — 9 : 1, 2, 4, 5, 6, 7
210 — L : 2, 3, 4 (COMPUTER LAB)
211 — P : 1, 2, 3, 6, 7 (PRESIDENTIAL CODE)

Anyone who has successfully completed **Max Headroom** will know that the reward is access to side two of the cassette and a personal message from Mmmmax himself. For those of you who have so far failed to complete the game and are desperate for a few well-chosen words from Mr Headroom, here's a routine from **Chris** Jetman **Turner** of Derbyshire which enables you to break into side two of the tape without having to finish the game first.

```
10 PAPER 0: INK 0: BORDER
0: CLEAR 65457
20 FOR g=65519 TO
65535: READ a: POKE g,a: NEXT
g
30 RANDOMIZE USR 65519
40 DATA 243, 55, 62, 255, 221,
33, 0, 64, 17, 110, 190, 205, 2, 8,
195, 0, 128
```



M.O.V.I.E.

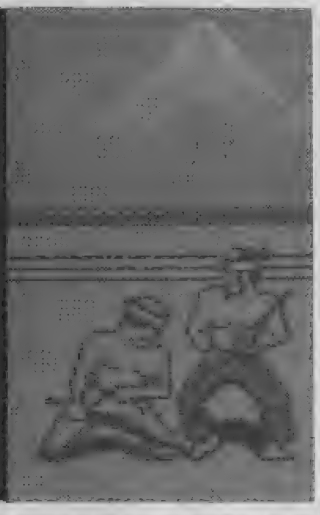
Quite a few maps and tips have come in for *M.O.V.I.E.* but **Toby Doig**'s were about the most comprehensive, so here they are. Still one problem, though: does anyone know where the second door is? If you do, then let me know.

1) If you find Vanya, kill her.
2) If you find Tanya, do whatever she says.
3) Near the start of the game there is a room with a parrot in it and a knight guarding the door. Get rid of the knight by saying "open". This makes the knight move out of the way.
4) In one of the alleys there is a knight who blocks the way to approximately 70 rooms. To get past him, drop a bottle between you and the knight and walk forwards pushing the bottle. When you are next to the door, grab the bottle and go through the door.
5) You may have come across a password puzzle. This is used in one of the rooms which has a knight guarding a door and two rolling balls. Say "puzzle" and the knight moves out of the way.
6) When throwing a bomb, it is highly advisable to move out of its path, or you'll get blown to smithereens with it.
7) When you meet a goodie, keep saying "God bless you". This extracts information from them quite successfully.

SAI COMBAT

For everyone frustrated at being beaten in **The Way of the Pointy Stick** or... **Sai Combat Brian Russell** of Falkirk has sent in POKEs that give 255 lives. If you can't beat those pointy stick wielding warriors now, then you never will. Unfortunately, this routine does make the screen a bit messy.

```
5 CLEAR 24610
10 INPUT "number of lives (1 to 255)" ; I: IF I < 1 OR I > 255 THEN GO TO 10
15 CLS : PRINT "PLAY SAI COMBAT TAPE FROM START"
20 LOAD "" CODE : POKE 65364, 201 : RANDOMIZE USR 65340
25 POKE 32421, I: RANDOMIZE USR 23450
```

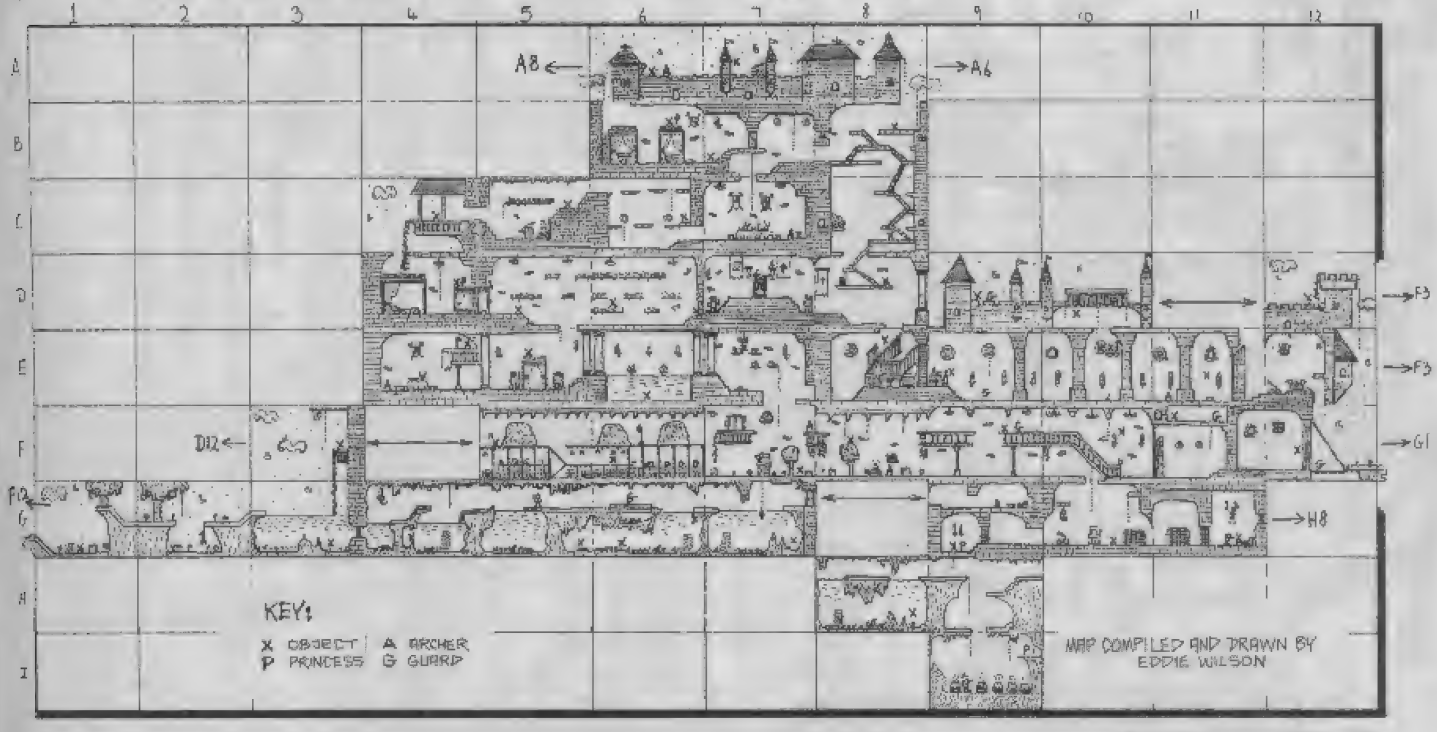


SOUL OF A ROBOT

Here's a poke for infinite lives for **Soul of a Robot**. The number of lives you have — entered in line 70 as the value for N — are actually registered on screen as '0', but don't panic, you do get as many as you asked for. This routine appears anonymously, as the relevant details went missing. Thank you, whoever you are!

```
10 REM Soul of a Robot pokes
20 FOR p=23296 TO 23329
30 READ a : POKE p, a : NEXT p
40 PRINT "PLAY TAPE AFTER BASIC"
50 RANDOMIZE USR 23296
60 DATA 17, 0, 27, 221, 33, 0, 64, 62, 255, 55, 205, 86, 5, 17, 88, 152, 221, 33, 156, 99, 62, 255, 55, 205, 86, 5,
70 DATA 62, N, 50, 212, 100, 195, 156, 99
```

SIR FRED IN THE MAP



▲ PART TWO PAGES 70/71

Tantalus Part One

PLAYING TIPS

CYBERUN

Here are some tips to go with the POKE supplied by Mike Smith (good surname that!) To use the plasma ray pick up the object shaped like two U's. To pick up the sail, first get the radar dish shaped object. The arms for grabbing and collating rocket pieces must be collected in order and dropped onto a platform located on the surface as far away as possible from the start. A rake shaped bit is first followed by a chequered twin, then two pieces one with CYLO written on it, and lastly with ULT1. Now pick up the fins, one of which must be taken before the other and then followed with the net-like doobrie and topped off with the nose. Zapping the crystals with the plasma ray will now fill up the net and when you turn yellow you can fly into the rocket with the sail and take off!

Initially, all pieces remain in the same place, so now find the boosters and add them, pick up the photon gun from the cloud to the right of start and get the two U's found right of here. Take the arms from the mountain on the right of the third hole from the start. Fly down here and get the next bit. Return and drop this and go left to the cloud near the mountain and take the plasma ray. Fly back to the first hole from the left of start. At the bottom go right as far as possible before going down further and following the floor until the second bit shows up. Take this back to your booty pile and drop it. Next is the second hole to the right. Down and right, down and left and down and right again to find the CYLO piece. Return this as previously and then fly left to find the UTL1 piece on a platform near the first mountain to the left. Return this to the drop point then recover the fin from the first mountain to the right of start along with the radar dish from the cloud just right from here. Drop these as before and collect the other fin from where the plasma gun was. Now fly down the first hole to the right of start. Down and right will take you to the net in the SE corner. Blast about ten crystals as before until you turn yellow. Drop it off as usual then return as the nose cone is down and right, down and left from here. Take that back and collect the sail from a cloud to the right of the first big mountain to the left. Follow the same routine with the sail and presto — take off!!

If you've played **Cyberun** to lots of deaths, then here's a little proggy from **Michael Smith** of Loughborough that stops you dying. Handy, eh?

```
10 LOAD "" CODE:RANDOMIZE
USR 24576: PAPER 0:PRINT AT
19, 0:LOAD "" CODE : POKE
23446, 62:POKE 23447, 175 :
POKE 23448, 50: POKE 23449, 72
:POKE 23450, 141: POKE 23451,
195 : POKE 23452, 128: POKE
23453, 92 : RANDOMIZE USR
23424.
```

SPELLBOUND

Last month, part of the solution for *Spellbound* was published along with a plea for anyone who had completed the game to write in. Unfortunately, no-one seems to have got through the entire game, but here are some tips to be going on with from **Rouven Priedon** who lives in Ashford, Middlesex. These will enable you to get through 76% of the game. I've been playing away, and should be able to come up with the last 24% in time for next month's column!

CASTING SPELLS

CRYSTALIUM SPECTRALIS
Using the map printed on page 66 of the May issue to get your bearings, first get the three Crystals — one is found in room B5, another in room A8 and the third in D8. Take them to room F9, and get the Crystal Ball from the lift, then take the Elf Horn from Samson. Now take the White Gold Ring from room D8, go back to room F9 and summon a character. When it appears, give it the Crystal Ball, pick up the White Gold Ring and cast the spell. You will also need the Wand of Command from room A9. Throw all three at Gimbal and he will be freed.
CANDLIUM ILLUMINATUS.
Get the Candle from room C2, the Shield from room F2, the Four Leaf Clover from room A2, and the Wand of Command from room A9. Go to Rosmar (Level A), drop the Four Leaf Clover, go to room F3 and get the Pocket Laser. Go back to Rosmar and give her the Pocket Laser. Cast the spell. NB. The Clover must be on the floor.
ARMOURIS PHOTONICUS
This will enable you to go in rooms B8 and C3 without the Glowing Bottle.
FUMATICUS PROTECTIUM
Get the Power Pong Plant from room G2 and the Red Herring from room C7. Take them to Florin and cast the spell. You will now be able to go into the gas room E3 without being killed.
PROJECT PHYSICAL BODY
Get the Glue from room E6 and the Broken Talisman from room F7. Give both to Florin and command him to help. Take the Talisman back from him. Get the Crystal Ball and cast the spell.
More next month . . . .

Here's a useful POKE sent in by **Mark Fletcher** of St. Albans in Hertfordshire for infinite energy and time to make Magic Knight's task a mite easier:

```
5 CLEAR 26060
10 PAPER 0 : BORDER 0 : CLS
20 PRINT FLASH 1 ; AT 9, 0 ; INK
7 , "PLAY SPELLBOUND TAPE
FROM START"
30 INK 0 : LOAD "" CODE 16384 :
RANDOMIZE USR 23296
50 POKE 55066 , 0 : POKE 55070,
0 : POKE 55071, 0 : POKE 55072 ,
0 : POKE 27871, 0 : POKE 36133,
0
60 RANDOMIZE USR 26627
```

BOMBJACK

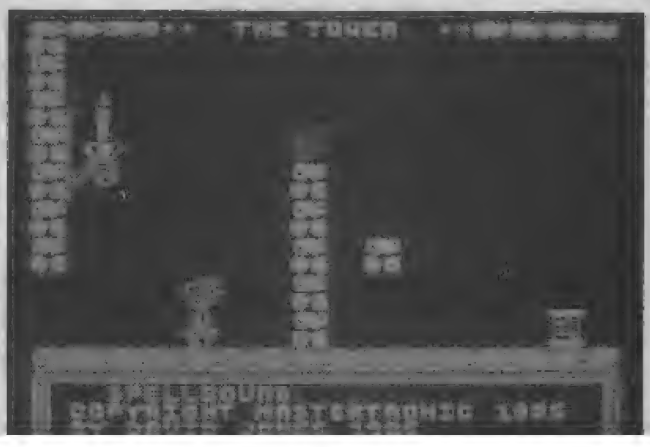
BombJack has been around long enough now for me to reveal these pokes from **Jason Emeades** of Northfleet in Kent. If you type in the following routine then it gives you infinite lives for both one and two players.

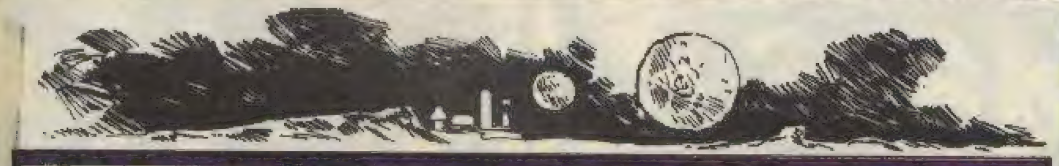
```
10 CLEAR 29877
20 LOAD ""CODE
30 POKE 65274, 71
40 POKE 65236, 70
50 POKE 65237, 85
60 FOR f=65517 TO 65535
70 READ a: POKE f, a: NEXT f
80 DATA 062, 000, 050, 088, 191,
033, 008, 252, 017, 240, 255, 001,
241, 140, 237, 184, 195, 075, 193
90 RANDOMIZE USR 65465
```

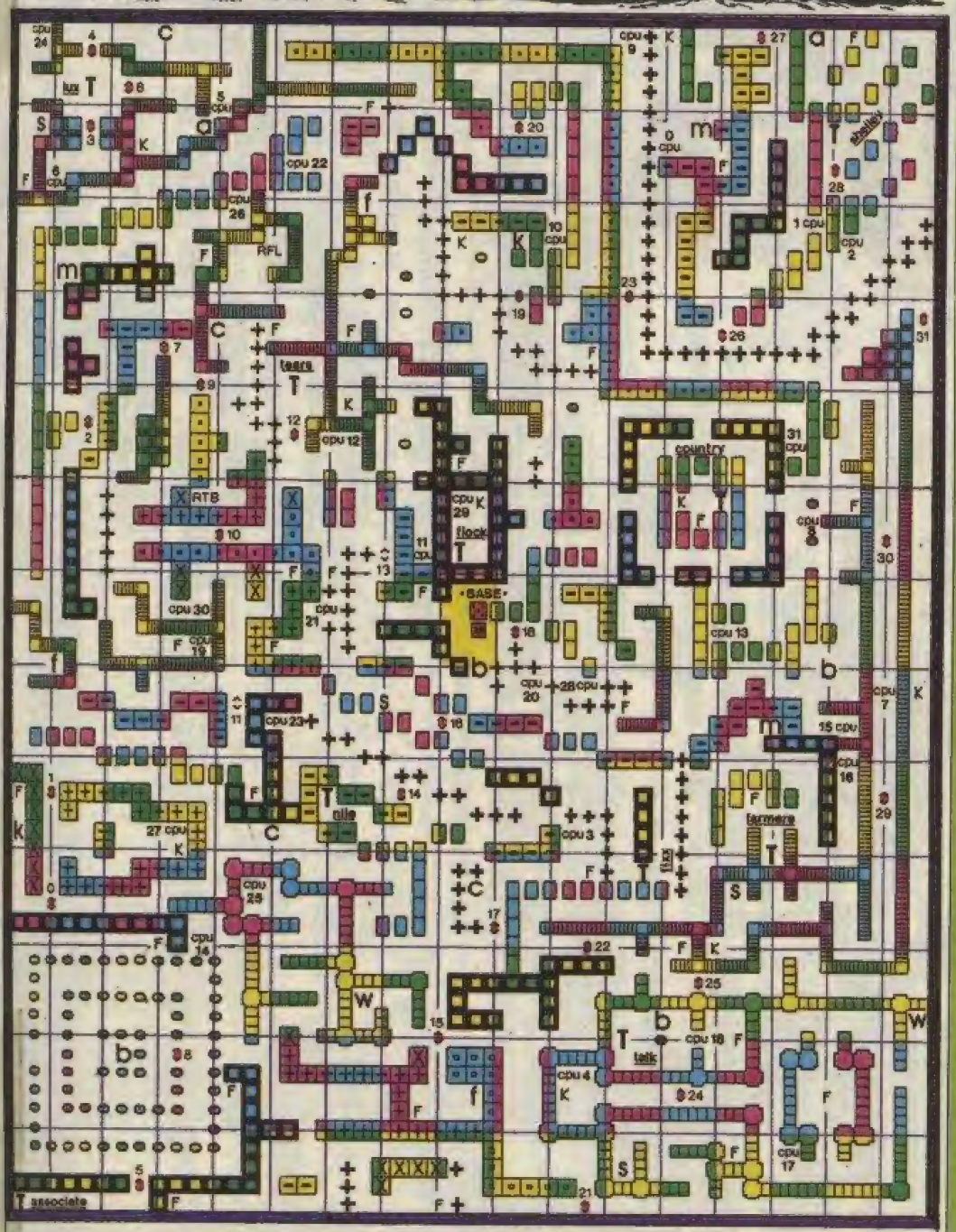
ID

Quite a few of you seem to have been working hard on *ID*, **Nu Wave**'s first release. Here are the keywords for five of the moods in the game — if you still haven't sussed what makes *ID* tick by next month, I'll be printing the rest of the clues in the July issue. Thanks go to **Roland Allen** from Leamington Spa, **Kevin Devine** from Scarborough and **Matthew Musgrove** from Bracknell in Berkshire for kindly supplying me with these tips.

1) *A drowning Austrian* **Mood**: lunatic **Keyword**: Hitler
2) *I was shot once* **Mood**: angry **Keyword**: bullet
3) *He was nailed to me* **Mood**: lost **Keyword** Jesus
4) *Ten Laws were on me* **Mood**: scared **Keyword**: commandments
5) *I drowned a civilization* **Mood**: rotten **Keyword**: Atlantis







GREEN BERET

Here's a minitip from **Brian Smyth** of Londonderry in Northern Ireland. As you come to the last lorry with a rocket on the back of it, climb up the ladder and move to the right. Then lie down and face the left. If you keep the fire key pressed down at this point you can't lose any lives and any soldier that has the misfortune to attack you gets killed automatically and your score goes up and up and up . . . By the way, has anyone managed to get higher than the first three levels in *Green Beret*? If so, then write and tell me, oh, and don't forget to include any tips you've discovered along the way.

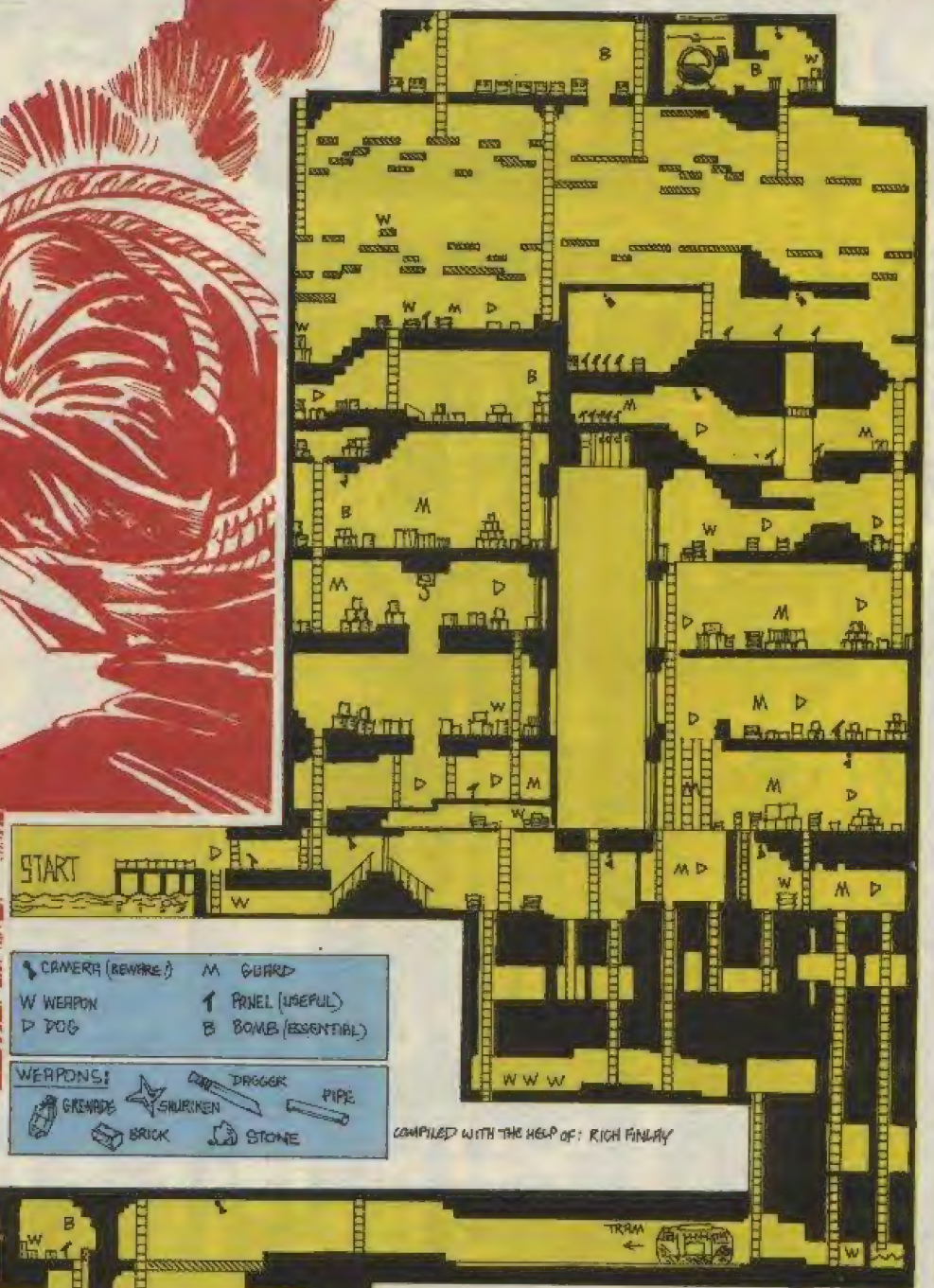
Adrian Singh supplied the following poke, saying in his covering letter that it was tried and tested. We tried it, tested it and with a bit of fiddling about with the CHECKSUM number, managed to get it working! So here is a working version of Adrian's **Green Beret** POKE that gives you infinite lives.

```
5 REM GREEN BERET POKES
10 RESTORE : LET TOT=0
20 FOR F=50000 TO 50169
30 READ A: POKE F, A
40 LET TOT=TOT+2*A:NEXT F
50 IF TOT<>38896 THEN PRINT
"ERROR IN DATA . . . ":BEEP 1,
1: STOP
60 PRINT AT 10, 0;"INSERT
GREEN BERET MASTER TAPE"
70 PRINT AT 12, 0;"START
TAPE. . . . "
80 RANDOMIZE USR 50000
100 DATA 62, 255, 55, 17, 186
101 DATA 6, 221, 33, 203, 92
102 DATA 20, 8, 21, 243, 62
103 DATA 15, 211, 254, 205, 98
104 DATA 5, 48, 233, 243, 237
105 DATA 94, 33, 140, 195, 229
106 DATA 33, 171, 98, 229, 51
107 DATA 51, 17, 195, 130, 1
108 DATA 20, 3, 33, 253, 94
109 DATA 253, 33, 17, 98, 221
110 DATA 33, 218, 99, 62, 202
111 DATA 237, 79, 195, 171, 98
112 DATA 1, 230, 2, 17, 241
113 DATA 130, 221, 33, 0, 0
114 DATA 253, 33, 0, 0, 49
115 DATA 62, 255, 33, 177, 195
116 DATA 229, 33, 231, 130, 229
117 DATA 51, 51, 33, 241, 130
118 DATA 62, 176, 237, 79, 195
119 DATA 231, 130, 33, 241, 130
120 DATA 17, 193, 138, 1, 92
121 DATA 0, 237, 176, 33, 212
122 DATA 138, 34, 217, 138, 34
123 DATA 221, 138, 33, 202, 138
124 DATA 34, 229, 138, 33, 239
125 DATA 138, 34, 249, 138, 62
126 DATA 195, 50, 13, 139, 33
127 DATA 223, 195, 34, 14, 139
128 DATA 195, 193, 138, 33, 62
129 DATA 0, 34, 129, 133, 33
130 DATA 50, 92, 34, 131, 133
131 DATA 33, 164, 62, 34, 133
132 DATA 133, 62, 63, 50, 135
133 DATA 133, 195, 84, 133, 0
```

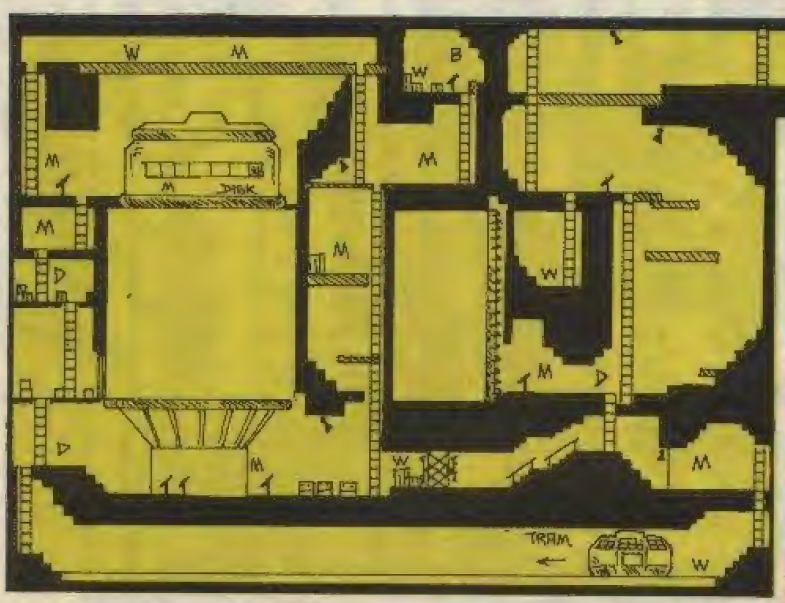
Tantalus Part Two

JOIN LAST PART HERE — NEXT MONTH...

PLAYING TIPS



COMPILED WITH THE HELP OF: RICH FINLAY



SABOTEUR

THE MAP.

SWORDS AND SORCERY

Last month a plea went out for anyone who had hints and tips for *Swords and Sorcery*. Well, quite a few people sent in morsels of advice, but one person got in touch with a set of tips that are completely correct. How can I be sure they're absolutely no-question-about-it-correct? Because they were given to me by **Mike Simpson**, the man who **wrote** *Swords and Sorcery*. So if anyone knows the solution to he game I suppose it ought to be him. Just hope he doesn't want his £20 worth of software for the June TOP TIP!

Going Shopping

In the armoury it is possible to select any item as your last choice, even if you cannot afford it. The prices are as follows:

sword: 20 dragons teeth
spear: 9 dragons teeth
staff: 14 dragons teeth
shield: 16 dragons teeth
armour: 40 dragons teeth
helmet: 7 dragons teeth
gold: 20 dragons teeth
wine: 5 dragons teeth
pie: 8 dragons teeth

Remember

Food is very handy because there is very little of the stuff about.
Successfully disarmimg a trap increases your thievish abilities.
Smashing a chest decreases your thievish abilities, but can increase your strength.
Hit points are also increased as you kill more monsters.
Practising JUMPING can improve your jump skill but makes you hungry.
RUNNING makes you hungry.
FOOD doesn't make you hungry! It's a valuable resource. Don't use it all in Room 61.

Fighting

If the "FULL EFFECT" message doesn't appear when you fireboit something, or the "EFFECT RESISTED" message pops up, the target may be totally resistant.

If, when you hit a monster "EFFECT RESISTED" appears, then it is immune to blows from the weapon you are using — try something else.

A few points of unarmed combat skill gets you the defence DODGE

Things To Do In The Dungeon . . .

Take cups to the Banquet Hall (room 74).
Take all food to room 61.
Get the key from room 56.
Watch out for the pit in room 55.
Get the RING OF JUMPING from room 53.
Don't use the book in room 84 (it permanently cuts down your statistics).
You cannot get through the gap in room 89, so don't waste time in trying.

Monsters and Fighting Them

Get the monsters to hit you in melee. Every time you start a battle your vitality is increased, conversely, every time a monster starts a battle it is decreased.

Villainy adds to the monster's hostility while holding a magic weapon does the opposite. Holding the magic staff doubly so.

Moving towards a monster can scare it. Moving away can make it bold.

Hitting or firing at a monster makes it very angry.

If you started the last melee, the monsters get angrier and they become more hostile when your character is carrying quest armour parts.

Monsters become more courageous and less hostile when you get involved in a conversation, but their courage and hostility both increase sharply should you be blind and more so if paralysis is your problem! If you are wounded they become more courageous, but may be less hostile.

Magic Numbers.

Once in the game you can keep track of your character's statistics via the magic numbers. Their meaning (in the order in which they appear on the screen) is:

DEFENCE (Armour)
FIGHTING SKILL
THIEVISH SKILL
MAXIMUM MAGIC POWER
UNARMED COMBAT ABILITY
STRENGTH (Physical)
DAMAGE BONUS (Weapon)
SPECIAL DEFENCE CODE
MAXIMUM HIT POINTS
JUMPING ABILITY

STARSTRIKE POKES

Phil Churchyard has sent in these pokes for infinite everything in Realtime's mega 3D game, **Starstrike II**. Beware, the routine doesn't want to work on the 128K machine in 48K mode!

```
10 REM starstrike loader
20 REM Infinite everything
25 BORDER 0 :INK 0:PAPER 0
30 CLEAR 63999
40 LET tot = 0
50 RESTORE
60 FOR i =64000 TO 64112
70 READ a :LET tot = tot + a + a
* PEEK (i-64000)
80 POKE i, a
90 NEXT i
100 IF tot<> 1978613 THEN
PRINT "ERROR IN DATA !!!"
BEEP 1, 0 : STOP
110 PRINT $1; AT 0, 4 ; "START
STARSTRIKE II TAPE"
120 RANDOMIZE USR 64000
1000 DATA 6, 5, 197, 221, 33
1001 DATA 0, 0, 17, 15, 39
1002 DATA 62, 255, 55, 205, 86
1003 DATA 5, 193, 16, 239, 33
1004 DATA 76, 250, 229, 33, 63
1005 DATA 5, 229, 33, 79, 250
1006 DATA 17, 207, 91, 1, 34
1007 DATA 0, 237, 176, 221, 33
1008 DATA 0, 64, 17, 207, 27
1009 DATA 62, 255, 55, 205, 86
1010 DATA 5, 243, 221, 33, 0
1011 DATA 0, 17, 34, 0, 62
1012 DATA 255, 205, 169, 5, 221
1013 DATA 33, 241, 91, 17, 78
1014 DATA 0, 62, 255, 195, 169,
1015 DATA 5, 216, 207, 26, 62
1016 DATA 99, 50, 63, 92, 62
1017 DATA 195, 50, 255, 256, 33
1018 DATA 231, 91, 17, 161, 238
1019 DATA 1, 10, 0, 237, 176
1020 DATA 195, 102, 238, 175, 50
1021 DATA 160, 131, 49, 192, 92
1022 DATA 195, 200, 175
9999 STOP
```

TRANZ AM ANTI TIP!

For everyone who has played and played and played *Tranz Am*, here's s little something from **Paul Longridge** of Portsmouth. Originally Paul started to delve into the workings of this game just for some practice in hacking, intending to find a POKE for infinite lives. Unfortunately he didn't succeed, but he did find these POKEs which might spice up your game of *Tranz Am* a little bit!

POKE 28610, 0 makes the game harder.
POKE 36573, 0 makes it even harder still!
POKE 27398, 0 makes the game go faster.
As usual put the POKES in before the RANDOMIZE USR statement. Have fun . . .

MINI TIPS

Knight Tyme

Here's a mini hint for anyone who has a copy of *Knight Tyme* and is a little stuck about how to get the space ship's crew to acknowledge their existence. Ask the Transputer, Derby 4 for help and it will give you a blank I.D card. To get this made official, find the camera and a roll of film. Find a co-operative robot, hand over the camera and the film and ask for help. There will then be a FLASH on the screen as the picture is taken.

Take the photo from the Robot and read it to check the photograph is actually of you and not of some fluff-ridden corner of the space ship. Have a fumble with the glue and the photo until you have an accident and the photograph gets stuck to the I.D card. Wear the I.D card and suddenly everyone will start being everso, everso nice to you.

WINTER GAMES

Here's a mini tip from **Steven Johnson** from Polegate, East Sussex for *Winter Games*. In the Biathlon section, when you want to go uphill, instead of pounding away at the left and right key, simply keep pressing the right key and apparently you should zoom upwards very quickly indeed!

Phew! That just about wraps it up for this month, and all that's left to do is to remind you that £20 of software is on offer to the TOP TIPSTER every month, and another £20 is available for map makers. Ultimate's *Pentagram* arrived in Ludlow just in time for a full review this issue, and I haven't been allowed near the game yet — I'd be interested to receive any tips, hints, POKES and maps that you might like to send in to help me get Sabreman through his latest quest. Steve Turner, author of *Quazatron* has sent in some hints on playing the game, which I'll start leaking out next month. A few early hints are already arriving for *Heavy on the Magick* and *Knight Tyme* but nothing, so far, on *Spindizzy* — I'm twisting Phil Churchyard's arm for a POKE or two (he wrote the game, after all!), but meanwhile, how about a few playtips from GEORGE drivers out there?
Finally, a plea from *Desperate gamester*, Stephen Dean who wants a pen friend with whom he can swap games and tips. If anyone feels like corresponding with him then drop him a line or a hint at: 42, Manston Crescent, Cross Gates, Leeds. LS15 8QZ.

Keep the tips flowing, to the usual address, but please mark them for my attention: HANNAH SMITH, CRASH PLAYING TIPS, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB.

TECH NICHE

TECH NICHE

PHASE 2 OF FACE 1

FRANCO FREY takes a close look at the New, Improved MULTIFACE ONE from Romantic Robot. It has everything you could need, except possibly for Biological Action!

Romantic Robot are now making an improved version of their MULTIFACE ONE — which we reviewed in the March issue of CRASH in its original form. Most of the promised additions have been implemented and the interface must now be one of the most versatile and user-friendly units on the market.

MULTIFACE ONE features an incredibly versatile SAVE facility for tape, Microdrive, Wafadrive and disk drive. It copes directly with the BETA and OPUS DISCOVERY drives and now also handles the KEMPSTON disk interface. Transfers to other disk systems can be effected via tape. A Kempston compatible joystick interface still appears on the upgraded unit, as well as an 8K RAM extension that can be used as buffer area or as a RAM disk or for machine code routines.

The unsatisfactory video output, which was linked to the noisy video signal at the edge connector, has been abandoned. In its place has come a toggle switch to make the MULTIFACE ONE invisible. This means that MULTIFACE ONE need not be physically removed should it clash with another peripheral connected to the system.

There are also major changes in the software area. Pressing the all important button reveals six options. EXIT returns you to BASIC with the condition that the standard system variables are still intact, RETURN continues the interrupted program, SAVE initiates the SAVE routine, TOOL accesses the new MULTI TOOLKIT routines, COPY copies the screen to any printer or printer interface which can interpret the COPY command, and JUMP provides direct access to any utilities within the Spectrum ROM/RAM.

The JUMP address is located at 8192 and 8193. At address 8194 is a flag determining whether the ROM (0) or the MULTIFACE RAM (1) is paged, (active). For direct access without going through the MULTIFACE menu, the identification code for RUN (Decimal 82,85,78) can be POKEd into 8195-8197, after which pressing the button BREAKs the program and a direct jump is made to the required start address. The JUMP command is useful for jumping directly into a resident disassembler, assembler or monitor.

One advantage of storing routines within the MULTIFACE RAM is that they remain unaffected by the NEW command. On the other hand, to save the contents, the whole RAM or part of it must be copied to the Spectrum RAM and saved from there. A BASIC program is provided in the manual for block moves into and out of the MULTIFACE RAM. The TOOL selection presents a new list of options. HEX toggles the display of the current byte between hex and decimal. To view a different memory area, the new address is typed and entered. SPACE clears the address. REG displays the Z80 registers which are held at 16358-16383. WINDOW opens a window in the middle of the screen to show 128 bytes pointed to by a flashing cursor. The address may be changed by using the cursor keys. TEXT translates and displays the bytes within the window into ASCII characters. QUIT gets you back to the opening screen menu. With all these options TOOL provides adequate means to view any system memory either byte by byte or in scrollable blocks of 128 bytes.

The facility to scrutinise the Z80 registers in the state they were during the BREAK is very handy indeed. This makes MULTIFACE ONE the perfect tool for investigating commercial programs by interrupting them manually at any given time either just to display the memory contents or to pass control automatically over to a disassembler.

The SAVE option makes the MULTIFACE ONE indispensable for transferring commercial programs onto the user's own fast storage system, be it Microdrive, Wafadrive or any of the available Spectrum disk drive systems. Programs are saved with or without screen and require little space due to a compression routine. Only the relevant memory areas are transferred and so several programs can be saved on one disk. MULTIFACE ONE need not be present when loading the saved programs. The only disadvantage is the corruption of the top screen area, which gets restored as soon as the program is left to run. At £39.95 plus £1.00 post and packing, this interface is a must for any budding programmer or for any serious games player with a fast storage device.

GETTING YOUR HEAD TOGETHER

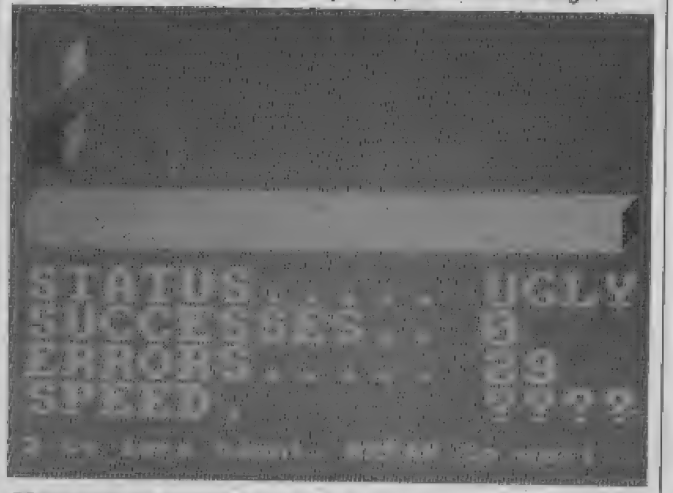
Following on from OPERATION CARETAKER — a complete computer cassette recorder care kit containing a head cleaning tape and alignment routine, **Global** have just released OPERATION ALIGNMENT for the Spectrum at £5.95.

Without doubt, faulty alignment of tape recorder heads is the major cause of tape loading problems — particularly if the program which is being loaded features one of the fancy hyper, mega or giga loaders favoured by software houses in the drive against piracy. Usually all that is needed is a tweak or two on the azimuth alignment screw that adjusts the playback head and all is well when the angle is restored to ninety degrees.

Getting that correct angle can be a tricky business — the only really accurate way to do it involves an oscilloscope, but then not many folks have one of those lying around the front room at home. With experience, it's possible to play a program tape and twiddle with the adjusting screw, getting a reasonable alignment by listening to the sounds emanating from the tape recorder's speaker, but the nervous or unskilled can make a total botch of things using this rather ham-fisted method.

Global come to the rescue with a program (that you might have to load in with a friend's tape recorder if your head is really wonky) that comes in a box with a dinky little screwdriver ideal for head twiddling. Once the program has loaded, sample data can be played into the computer and the tape head adjusted while you watch the effects of your twiddles displayed in the form of dynamic barcharts that give a readout of the status of the tape player in real time.

Technobabble aside, the package represents good value if you are having problems with tape loading errors and is worth keeping with the computer. After at while, you may find that using the package has trained your ear and the software can be dispensed with — don't lose that dinky screwdriver though!



OPERATION ALIGNMENT had better not be checking out Cameron, our photographer, rather than the tape deck. Status: UGLY, no successes, lots of errors and a very dodgy speed of operation? No, that's not our Cam . . .

INTEGRATING DIGIT WITH THE PLUS

Frel Limited, makers of the COMCON joystick interface, have come up with another interesting product — this time a kit to improve the feel and action of the Spectrum Plus keyboard. Arriving in a video-sized box the kit contains a myriad of little parts which have to be fitted to the Spectrum's internals.

The back is already off one of the office Pluses, and a full report on DIGIT Fitting should follow next issue...

Work begins on fitting the DIGIT parts to a Spectrum Plus...

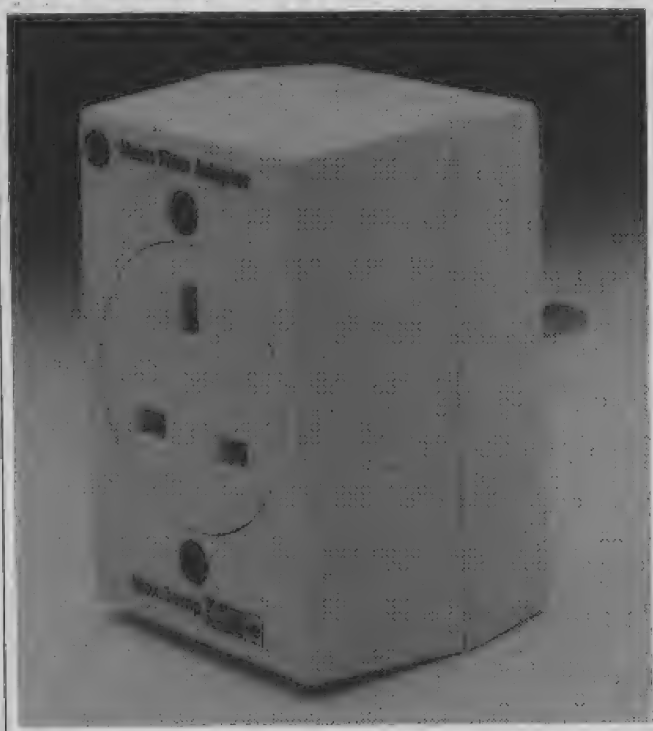
SMOOTHING OUT THE SPIKES

Duraplug have come up with a unit that takes your electricity supply to the laundry. A lot of modern electrical equipment, including video recorders and computers are susceptible to problems caused by voltage surges in the mains supply.

Quite often, appliances in another part of the building or street cut in and can cause very nasty things to happen to the data in a computer that shares the same local supply. If you're just about to reach an all-time high-score on the latest Mega-game and Sid next door decides to use his power drill, the result can be very annoying. More serious users, busily processing words or doing very hard sums with their computer, may suddenly lose hours of work.

Duraplug's MAINS FILTER ADAPTOR is a straightforward solution to the dirty mains problem. It pops into a wall socket, and you plug your computer's powerlead into the adaptor. A red LED indicates whether the power is on at the wall and as long as you don't try to draw more than a total of 3 amps through the unit, all should be ticketty boo from then on. Providing there are no **Interruptions** in the supply, that is...

Around the £18 mark, available from most electrical shops.



Duraplugs simple and elegant solution to the problems of Dirty Mains (that's not Franglais for grubby paws, either). Their MAINS FILTER ADAPTOR retails for £18

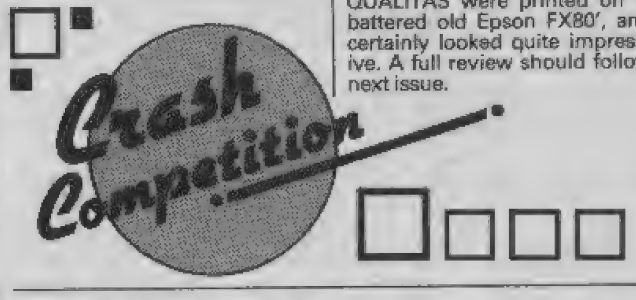
BLAST BACK

After the liquidation of the company which brought BLAST (See previous NICHEs) onto the market, a new company has been formed which is to continue marketing the product. **Systems Software (Oxford) Ltd** have taken over rights to the compiler, but as we went to press it was not possible to ascertain whether owners of problematic early versions of BLAST will receive support from the new owners of the rights to the compiler. We'll keep you posted in future issues.

TINKERING WITH TASWORD

If you're an avid TASWORD user and have ever fancied producing some slick output with your dot matrix printer, **Severn Stars Publishing** have got some good news for you. They are about to release QUALITAS, a utility that squeezes Near Letter Quality output from dot matrix printers.

The TASWORD TWO version is already available for £7.95 and a TASWORD THREE implementation is just around the corner, priced at £8.95. The sample print out sent with the letter announcing the imminent arrival of QUALITAS were printed on 'a battered old Epson FX80', and certainly looked quite impressive. A full review should follow next issue.



SPECS AND DRUMS AND ROCK AND ROLL!

Those of you who have been following Simon Goodwin's TECH TIPS column — or indeed getting in tune with Jon Bates, will have realised that the **SpecDrum** from Cheetah is a pretty nifty piece of equipment.

Despite the fact that we missed out a bijou listing last month, you'll have gathered that there are a lot of interesting things that can be done with this little black box and the software that accompanies it.

Just for fun, the Chaps at Cheetah have agreed to give three SpecDrum units away in this competition which should test your drumming knowledge a bit and check that you have indeed been reading about SpecDrum in these hallowed pages. Runners up, who get all the answers right, will win a £3.00 off voucher, redeemable against a SpecDrum if you buy it by mail order, direct from Cheetah! Not bad eh?

On with the thinking caps, and make sure your entry arrives by or before 26th June this year at **DRUMMING COMP, CRASH, PO Box 10, Ludlow, Shropshire, SY8 1DB.** Answers on the back of an envelope or postcard, please.

1) *One of these instruments is not part of the SpecDrum kit, which one?*
- a) Hi-Hat
- b) Cow-Bell
- c) Plectrum

2) *One of the following is not a drum machine is it:*
- a) Doctor Rhythm
- b) The Clog
- c) Linndrum

3) *The SpecDrum has a Latin kit. Does this mean:*
- a) it has South American instruments
- b) it has swarthy looks and an Italian suit
- c) the names of the drums are in Latin

4) *Which drummer appeared three times on last year's Live Aid concert:*
- a) Nigel Olsen
- b) Phil Collins
- c) Dave Donovan

5) *Ultravox have a drummer as well as many drum machines. What we want is the drummer's name is it:*
- a) Karen Wann
- b) Connie Francis
- c) Warren Cann

6) *Which drum is sometimes called a kick drum:*
- a) Bass Drum
- b) Tom Tom
- c) Snare Drum

7) *Ian Paice is the drummer for:*
- a) ZZ Top
- b) Deep Purple
- c) Ozzy Osborne

OF DATABASES, DISCO REMIXES AND DOT SPOTTING

This month, Jon Bates takes a peek at a couple of music tutor programs from Childsplay and examines a combination Audio/Program cassette with hit tunes from the Commodore on one side and a database on the other. Next month he'll probably be back making music with add-on hardware . . .

MUSIC TEACHER Parts 1 & 2

Childsplay Software

In view of the wealth of music-making programs around, it's probably not a bad idea to find out what those queer-looking blobs and sticks dancing along the lines in a music score actually mean if you want to get involved in tunesmithing with your Spectrum's assistance. As most music software involves a piano-type keyboard, you'll probably be lacking in the skills of note finding as well. So a program such as this could well be a bonus in actually getting you to understand what music scores are all about.

Parts One and Two concern themselves with the actual names of notes and their relative positions on the lines and spaces. On loading up, the menu offers you option of playing games, getting an introduction to the world of lines and spaces and a tour of the theory behind it all.

PART ONE

Diving straight into the games there are various levels of difficulty. Note names are displayed on screen to help you and notes can be entered either by keys 1 to 8 (which correspond to the notes A to G) or by moving a cursor over a keyboard on the screen. One thing that was quite useful, educationally, was the section where the player has to match up the pitch of a note that has to be found with the pitch that you think it is. The really keen could turn off the screen and play by ear!

Each game is timed and the resulting score shown at the end. If you get a decent enough score you are allowed into the composing section. Here you enter your own tune and have the dubious privilege of hearing it back — although with all the notes being the same length and played at a pretty pedestrian playback speed I found this a bit tiresome. Rests appeared here without any previous explanation. It would have been nice to have been able to access the composing section direct from the menu.

PART TWO

Part Two introduces sharps and flats and revises Part One, but doesn't have a composing option. All of a horrible sudden there are piles of key signatures without any lead up other than in the on-screen theory pages. Generally the idea is good and is one that has been covered no better by similar programs. But I have a feeling that it tends to defeat itself by having a theory section which consists of pages of text and the theory side does not actually take an active part in the program. The games could be more imaginative and make more use of colour and graphics. Although interactive music learning is obviously the way forward, it won't succeed if the program is little more than an electronic personification of a stuffy music teacher.

Jon Bates

MUSIC TEACHER is available from John Child, 2 Southview Drive, Uckfield, Sussex, TN22 1TA
PRICE: £10 for Parts One and Two together

Note naming against a time limit in the key of C Major. It's Cameron, photography person who's making all the mistakes, not musical maestro Jon Bates!

DATAHITS SOFTWHERE

Producer: Mupados
Price: £4.99
Available only through WH Smiths

'What's this?', I hear you scream. 'CRASH doing reviews for ZZAP! products!?' Not quite. Let me explain. *Datahits* is a cassette containing computer-generated theme music from five best-selling Commodore games in audio form on one side: a sort of 'Greatest Hits' compilation of computer game soundtracks. The other side has a database program which runs on the Spectrum. The database enables you to file your cassettes and stack the titles of the programs complete with the tape-counter number in the database. The filing system doesn't have to be used for computer games — the database can be adapted for records and audio cassettes. The *Softwhere* system, although fairly simplistic is quite adequate if, like me, you can loose track of programs and music cassettes within minutes. (*Don't suppose it'd make any difference to Mr Liddon's lifestyle* — **ED.**) It has a fairly large capacity which, at full stretch, can contain over 20,000 titles! It's just a shame the programmers didn't include an option to print out the contents of the database — such a facility would have made the software much more useful.

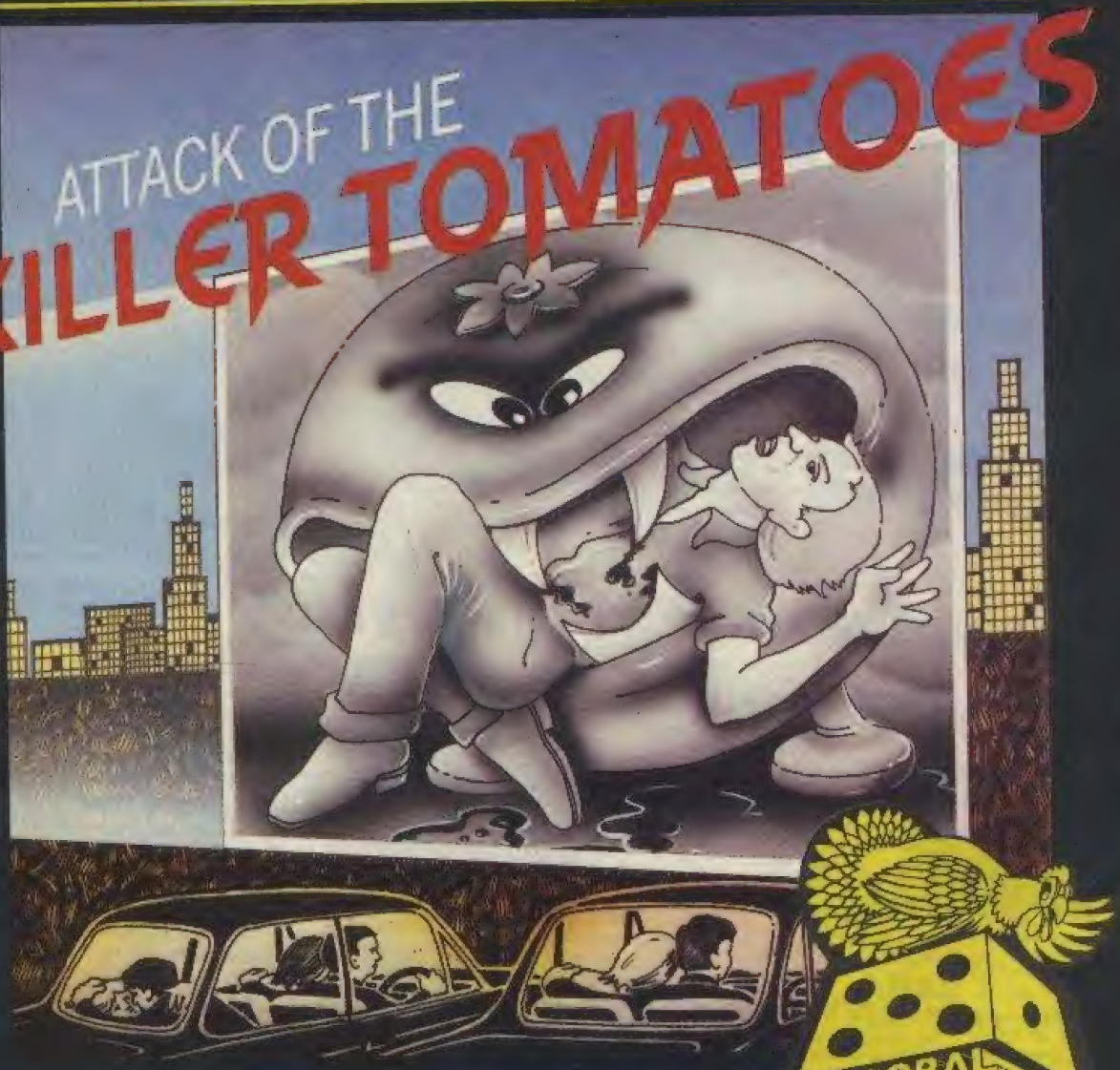
The audio side features Commodore renditions of the music from *Rambo*, *Neverending Story*, *Ghostbusters*, *Crazy Comets* and *Hypersports*. The Commodore is aided by several chunks of hardware (samplers, drum machines and sequencers) and the result is not bad at all. The sound quality is very good (and so it should be for £4.99). If I was to be a bit critical I would say that some of the arrangements lack imagination and the resulting sounds can be a little wearing after a bit. I also failed to hear the 'stereo dance-mix' effect that the insert promised.

Definitely A for effort, though. What we now await is a Spectrum-generated cassette. If anyone out there has been busy cranking their 128's and all other 48K music add-ons into musical life please, send me a copy — I'd be very interested to hear from Spectrum composers. (Usual address: Jon Bates, PO BOX 10, LUDLOW, Shropshire SY8 1DB.) This could open up a whole new ball-game in the record market. I wonder how long before we see music that originated as a game soundtrack reworked for the charts?

Jon Bates

Nominated for the "Worst Vegetable Movie of all Time"

ATTACK OF THE KILLER TOMATOES



A GLOBAL GOLDEN TURKEY PRODUCTION

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Based on one of those all-time lows in the world of movie making that were actually nominated for a Golden Turkey Award, the Attack of the Killer Tomatoes squelches on to your screens courtesy of Global Software

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"It transforms the humble Spectrum" – Sinclair User.
"... will release the full potential of your Speccy ... superdooper ...". – Your Sinclair.

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"... The GLP ... has a lot to recommend it ..." –Sinclair User
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"... The 120D is an excellent printer ..." –Sinclair User
only **£235.00** (Inc. VAT).

THE NEW SAGA DX85

Big and robust the DX85 is a heavy duty dot matrix printer which is made in the U.K. It prints at 120 c.p.s. It has a bi-directional logic seeking print head and centronics interface (RS 232 available). It has a draft quality mode and costs only **£199.95** (Inc. VAT).

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The LTR1 is a 12 c.p.s. letter quality printer with RS232 and centronics ports built in. The LTR1 prints in ink onto standard paper and requires an interface to work. The LTR1 is only **£139.95** (Inc. VAT).

SAGA SYSTEMS' SOFTWARE

"the author ... has succeeded in surpassing the quality of all word processors on the Sinclair market and many in the MS-DOS and CP/M markets ... you lucky Spectrum people ..." –John Gilbert, Sinclair User.

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PRICE: £13.95 inclusive of VAT

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SAGA 2001	☐	£119.95	Free	
SAGA LO PROFILE	☐	£39.95	£1.50	
128K Keyboard up-grade kit	☐	£4.99	Free	
LTR1 PRINTER	☐	£139.95	Free	
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SAGA GLP	☐	£199.95	Free	
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TECH TIPS

Simon Goodwin brings up more Excuses and Exclusives on the Spectrum 128 and Cheetah SpecDrum — plus all you ever wanted to know about Interrupt Mode 2!

Well! What can I say? Part of last month's TECH TIPS vanished into a wormhole in space (somewhere between Editorial and the Art Room, actually) and our whizzo scoop on *SpecDrum* sounds ended up bereft of a listing and a table.

At least, I hope it was a wormhole.

Besides catching up on the missing bits of last month's column, this month I've got more dirt on the Cheetah SpecDrum. I explain how to vary the volume of drums and produce a Fairlight-style graph of every sound. There's enough information (Art permitting!) for you to make up your own drums, or add effects to the sounds Cheetah supply. The results turn your £30 drum box into a gadget that can out-perform semi-pro devices in the £100-£200 price bracket.

Having saved at least £140, you can rush out and buy a Spectrum 128. At long last the CRASH machine has arrived at chez Goodwin; in this issue I've got information on RAM paging (including an exclusive trick which lets you access all 128K from BASIC) and an in-depth analysis of the real difference between the new machine and its predecessor. I've only had the Spectrum 128 for a few days, so I'm still finding out about its inner workings. Next month I should have a copy of the Spectrum 128 Technical Guide, so I'll really be able to blind you with science.

KEY INFORMATION

If you want the extra editing functions of the keypad, but don't want to pay the £20 that Sinclair Research were asking, I can tell you how to get the same effect from the normal keyboard . . . the add-on keypad gives you new editing functions on single keys. The Spectrum 128 has to recognise these somehow; it uses the key-codes which follow the normal Spectrum user-defined graphics. On a 48K machine you can type letters from A to U in GRAPHICS MODE, to get the corresponding 21 user-defined characters. Letters from V to Z are ignored.

But the 128 treats those 'spare' codes as editing commands. In each case, in the absence of a keypad, you have to press the GRAPH key — near the top left corner of the keyboard — before and after the appropriate letter. The first press selects GRAPHICS MODE, so that the keys have their special effects, and the second press switches the mode off, so that you can type normally thereafter. Annoyingly, unlike the 48K machine, the 128 doesn't change the cursor when GRAPHICS MODE is selected.

GRAPH V GRAPH instantly moves the cursor to the start of the last line of your program. **GRAPH W GRAPH** takes you to the very beginning. **GRAPH X GRAPH** propels you to the end of the line — very useful that one — and **GRAPH Y GRAPH moves the cursor to the start. The last 'secret' key-code, GRAPH Z GRAPH**, toggles the editor display between the top and bottom parts of the screen.

ROM WRONGS

These functions only work when you're in 128 mode, but they have a lingering effect when you try to use 48K software. When the new machine is put into 48K mode it 'hides' the extra 80K of memory and the 16K utility ROM, but it still doesn't behave exactly like a Spectrum or Spectrum Plus. The main incompatability has the unfortunate effect of stopping Kempston (and compatible) joysticks from working in many games. The explanation is a bit technical, but here goes . . .

A 'heartbeat' signal generated inside the Spectrum causes it to stop what ever else it is doing and run a short machine-code program, 50 times a second. Normally this program just reads the keyboard and updates the computer's internal clock. The routine is buried inside the Spectrum ROM, so you can't change it.

However, it is possible to divert the effect so that another routine gets called every 1/50 second. Many popular games use this effect to read the joystick or keys, move sprites or generate sound effects. The diversion involves setting a software 'switch' inside the Z80 processor, so that it jumps to a routine indicated by the programmer instead of the normal ROM routine.

Unfortunately this mode — Interrupt Mode 2 — gives external devices control over which routine gets executed. Devices can alter the diversion by presenting different values on the computer bus — the connector at the back.

Games programmers don't want this — they want the same routine to run regardless of the value on the bus. But the Kempston joystick interface upsets things by presenting values when it shouldn't, diverting the machine-code in the process.

This, in case you are wondering, is why *Tornado Low Level* used to crash if you tried to play it with a Kempston stick connected — the interface made the processor look in the wrong place at every heartbeat.

Values on the bus can range from 0 to 255, so the processor can fetch the routine's address from up to 256 different places. In 1983 Quicksilva's **John Hollis** realised that a table of 257 identical bytes will always send the processor to the same address. (257 identical bytes, because an address takes 2 bytes.) Such a table is a bit wasteful (for some reason, John actually used about 700 bytes!) and the possible destinations are a bit limited, but you can be sure of a reliable call 50 times a second, whatever is plugged into the back of the computer. In *Aquaplane* this effect is used to give a two-colour border (sky and sea) by changing the colour as the TV re-draws the picture, 50 times a second.

This technique worked, but it used quite a lot of memory. **Ian Oliver** of Realtime Software had the fiendish idea of using the 'empty' locations in the old Spectrum ROM instead of a table in RAM. These happen to contain the right value (255) to direct the computer to the very top of memory. A relative jump instruction at address 65535 interacts with the -13 value at the start of the ROM (logically, the 'next' address) to send the processor to address 65524, where you can put a jump to anywhere you like. The whole trick uses just 12 bytes of RAM, and it is totally impervious to the effects of the Kempston interface. It's very efficient, very clever, and programmers love it. Dozens of top games use the technique.

But . . . Sinclair have put routines to read the keypad into the previously-unused area of ROM in the 128! the 'blank' area is now full of code, so the trick won't work. The problem can be cured if software houses go back to the old John Hollis method, but that needs much more space, in rather inconvenient places. Many games already use every byte on the 48K machine . .

It's hard to see what can be done to get around this problem, in the short term. Amstrad only show their ignorance by complaining that Spectrum programmers should "follow the rules". Sinclair never published any rules about what should and shouldn't be done on the Spectrum. If programmers had stuck to the information in the Orange manual we'd still be playing *3D Tanx* and *Mined Out* . . .

128K FROM BASIC

The Z80 processor in all versions of the Spectrum can only address 64K of memory at a time. 16K is used for ROM and 48K for RAM. Older peripherals — such as Interface 1, ZX LPRINT, the VTX modem and so on — used a technique called paging to disable the ZX BASIC ROM and replace it, temporarily, with another.

A similar technique is used on the 128, to allow 128K of RAM to fit into the 48K space. Of course, you can still only have 48K at a time. As supplied, the Spectrum 128 uses 16K as workspace when programs are being edited, and the remaining spare 64K as a RAM disc — an area of memory into which you can SAVE programs or data. Unless you want to mess around with files, your program is stuck within the confines of the usual 48K.

CRASH EXCLUSIVE

But that's just what Sinclair said. Contrary to what you may have read in other magazines, it is easy to switch the 128K around from BASIC. All you need is one POKE instruction! Before I spill the beans, I'd better explain how the 128K is arranged.

The memory in the new machine is treated as eight 16K pages, numbered from 0 to 7 in

classic computer programmer tradition. Page 5 contains the normal screen memory and what would be present on a 16K Spectrum — addresses from 16384 to 32767. Page 2 contains the next 16K, from 32768 to 49151. Then things get interesting.

All the other six pages — 0,1,3,4,6 and 7 — fit into the space from 49152 to 65535. Of course, only one page can be accessed at a time. You select the page by storing the number of the page you want, plus 16, at address 23388.

Before you go swapping pages you should type CLEAR 49151, so that ZX BASIC doesn't try to store information in the 'top' 16K — otherwise it will get very confused when the information vanishes and a new page appears!

I'm still waiting for the technical details of the 128, so I'm not sure WHY this POKE works — but it does. Normally page 0 occupies the top 16K. As soon as your BASIC program stops, page 0 re-appears and something POKEs 16 back to 23388 — but you can PEEK or POKE, LDIR or whatever in the 'new' pages while your BASIC program runs.

For example, write a program that starts with POKE 23388, 17 (page 1) and then examines the contents of memory from 49152 onwards. You will see the contents of the first quarter of the RAM disk. The next three quarters are in pages 3, 4 and 6; they can be accessed by POKEing 19, 20 and 22 (16 plus 6) respectively. You can look at the editor's workspace, and the RAM disk directory, by selecting page 7 with POKE 23388,23.

Most amazingly, you can even end up with the same page of RAM in two places! Try this line:

```
1 CLEAR 49151: POKE 23388,21: POKE 49152,255: PAUSE 0
```

This moves page 5 into the top 16K, and then POKEs 255 at the start of the page. However, video information from 16384 upwards is still being read from page 5. The POKE to 49152 puts a line on the screen — even though the screen is at 16384. The same memory is appearing in two places!

You can do the same with page 2 — normally 32768 to 49151 — but you should be wary of POKEing it as you might corrupt your BASIC program.

It's a fiddle to gain access to all 128K, but it can be done. Unfortunately you can't divert RAM into the bottom page — where the ROM normally appears — and switch the video memory out of the normal 64K completely. So you can't run the CP/M business operating system on the Spectrum as you can on the 'other' Amstrad machines. Still, who cares?

HARD FAULTS

The edge-connector at the back of the 128 is missing a few signals, compared with the Spectrum. It is no surprise that the old display signals (U, V, Y and VIDEO) are unconnected, as the new machine has an RGB and Composite video output socket.

More importantly, the IOR QGE signal has gone. This used to allow external devices to 'turn off' the Spectrum ULA so that they could imitate the keyboard. The original version of the Comcon joystick interface, among others, used IORQGE, and wouldn't work on the 128. A new 128-compatible version is now available.

128K INSTANT INTERFACE

The other joystick interfaces I got working were an ancient Stonechip programmable port, an Interface 2 (after pressing RESET) and — of course! — the Instant Interface, documented in the December 1985 TECH TIPS.

You'll need a copy of the original article to fit the port, but here are some new points to remember. There are eight screws on the underside of the machine — three long ones, by the metal heat-sink, a sharp edged one by the edge connector, three on the right hand side and one on the bottom lip. As ever, remember that you invalidate your warranty by pulling your machine apart.

The six wires from the joystick go onto the backs of the keyboard connectors; these have been moved, but are otherwise identical to the ones on the 48K machine. The new circuit board is held in by two very short screws near the front edge of the machine. Leave the three screws by the heat sink alone.

You must unplug the regulator, on the right, by pulling gently on its white connector. Prise the reset switch vertically out of its slot, and then turn the board upside down for soldering. When you put things back together, note that the regulator wires should be coloured Green, White, Red from left to right as you view the machine with the edge-connector pointing away from you. Don't try to test the machine until you've re-connected the regulator!

MORE TESTING

I tried a few other peripherals on the 128. There seems to be a general problem with devices that use input ports — the Datel sound sampler was able to produce noises (via port 127) but I couldn't read anything back from the same port. Perhaps the 'strobe' port — number 191 — was not working properly.

Amazingly, my Currah Microspeech worked first time, automatically selecting 48K mode and chattering away quite happily on the new machine. Microspeech is available at a silly price nowadays, and it is good to see that it works on the new machine. The BETA Disk system is definitely NOT compatible with the 128, and I hear that the VTX-5000 modem won't work either.

I found that a ZX LPRINT 2 parallel printer interface worked fine on the 128 in 48K mode. In 128 mode you MUST use a printer connected to the serial port — the ZX Printer won't work in that mode, not least because some of the new System Variables are stored in the ZX printer buffer!

If you've got a Centronics printer you may be interested to hear that serial to parallel convertors for the QL work perfectly on the 128. The plugs (for once) are the same. I tested this with a Connexions QL interface, bought at Boots, and it worked straight away. COPY generates codes for a EPSON FX (or compatible) printer. The Miracle Systems QL interface should also work.

The Cheetah SpecDrum seemed to suffer from software, rather than hardware, incompatibility. I could push the cones of my speakers back and forth by sending different values to port 31 from 128 BASIC, but the drum software wouldn't work in 128 or 48 mode. This is a shame, because the SpecDrum could do a lot with extra RAM — you could have about 40 different drums loaded at once, using the page-flipping technique explained earlier.

SPECDRUM REVISITED

Back to humble 48K Spectrum users now, with further hints about Cheetah's SpecDrum. The SAMPLE EDITOR program, which went missing last month, lets you load any drum sound into memory. You'll need to use the Cheetah Kit Editor to extract individual drums from a kit, but you can load the RIM and HI TOM sounds directly.

The extra lines from 600 to 620 print out the name and type of a sample, once you've loaded it. Of course, you can change any of this information with POKEs.

DRUM TUNING

Once you've got a sample in memory you can tailor the sound, in just about any way. Each sample is made up of 2-3,000-odd numbers, representing back and forth movements of a wave (or speaker cone). The computer plays these back at high speed, and electronics in the SpecDrum convert the numbers into a changing voltage. 20,480 numbers are processed by the hardware every second, which explains the high quality — the bandwidth or tonal range of the system is about the same as a good cassette recorder or a Medium Wave radio station.

The SpecDrum is an eight-bit system, which means that it can cope with 256 different levels. There's only one hardware channel, but the effect of three sounds at once can be produced by adding together the level for each sound.

To make the adding easier, each byte is stored as a signed value, between -128 and 127. The Spectrum's PEEK command treats negative values as if they had 256 added to them, so a little code is needed to correct things. POKE copes perfectly happily with signed values.

ACOUSTIC SIGNATURES

Line 700 scans through an entire sample. The sample should be loaded with the other program, to set the value of the variable T (the sample type). Line 710 converts each PEEK into a signed value.

The first line 720 just plots the graph of the sound across the Spectrum display. If you want to see this work well, try plotting the KICK D from the Latin kit. The scale is compressed, to fit the entire sound on the screen; you may find it is better to look at only part of a high pitched sample, by removing the INT, brackets and /12 in line 720. The plot will stop with an error-message when the edge of the screen is reached.

EMPHASIS

Unlike the SpecDrum, most real drummers bash away at varying levels as they play. The SpecDrum only plays each drum at one volume, and this is very limiting musically. Upmarket drum synths have an emphasis button which can be used to make certain beats extra-loud.

You can adjust the levels of the SpecDrum samples by multiplying or dividing the stored values. Large factors lead to distortion, but a factor of 2 is barely discernible to the ear, so I find I get best results by contrasting doubled and halved samples. Simple rhythms played on one drum, alternatively using two levels, sound great.

To change the level of a sample, use line 700 and 710 to read each value and add the second line 720. Set FACTOR to 2 or 0.5 before you GOT TO 700, and the sample will be turned up or

SAMPLE EDITOR LISTING:

```
100 CLEAR 26767
110 FOR I=26768 TO 26784
120   READ C: POKE I,C: NEXT I
130 PRINT "Play drum tape."
140 POKE 26780,86: POKE 26781,5
150 GO TO 300
200 PRINT "Tap a key to save.": PAUSE 0
220 POKE 26780,194: POKE 26781,4
300 POKE 26771,165: POKE 26774,8
310 POKE 26775,0: POKE 26777,0
320 RANDOMIZE USR 26768
330 LET T=PEEK 26789
400 POKE 26771,175: POKE 26774,0
410 POKE 26775,8+4*(T=130 OR T=132)
420 POKE 26777,255
430 RANDOMIZE USR 26768: STOP
500 DATA 175,221,33,0,104,17,0,0
510 DATA 62,0,55,205,0,0,245,193,201
```

down respectively. You can check this by re-printing the graph. I POKE a 'plus' or 'minus' character into the names of samples which have been processed in this way, to remind me what I've done when I come to re-load the sound.

EXTRA ROUTINES:

Display drum details:

```
600 PRINT "Drum type: ";PEEK 26789;". Name ";
610 FOR I=26790 TO 26796: PRINT CHR$ PEEK I;
620   NEXT I: PRINT: STOP
```

Graph sample:

```
700 FOR I=26799 TO 28846+1024*(T=130 OR T=132)
710   LET L=PEEK I: IF L>127 THEN LET L=L-256
720   PLOT INT ((I-26799)/12),88+L: NEXT I
```

Adjust emphasis (suggested FACTORs 0.5, 2):

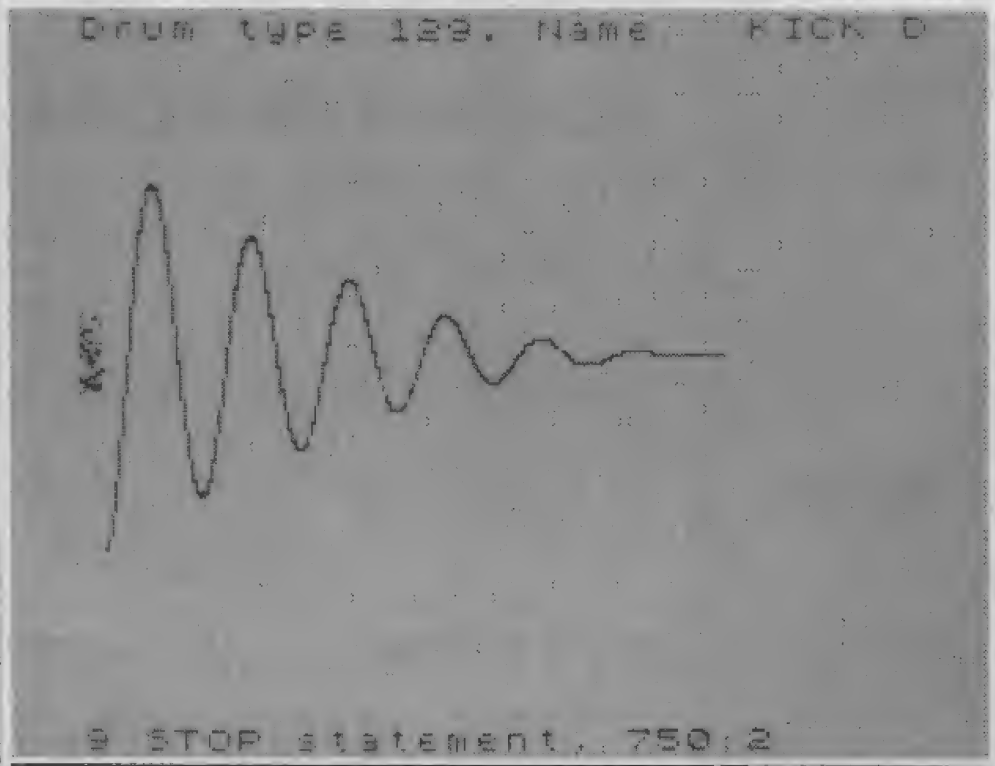
```
720   POKE I,L*FACTOR: NEXT I
```

CLIPPING

It is important that the total level of all the drums being played never exceeds 127 or drops below -12, or the sound will be badly distorted. This can never happen when you use the standard drums, because they are recorded so that the total of all the loudest drum levels is within a safe range (the Bass drum gets the most range, and the other two channels share the rest).

If you adjust the volume of drums you obviously run the risk that you'll exceed the proper range. It's up to you to avoid combinations that do this — it's very easy to tell when clipping takes place, because the sound is awful!

Once you've got a sample in memory you can play about with it to your heart's content. You can add the first part onto the second, giving an echo result, or POKE a made-up waveform into memory. You can get a good idea of the shape of sounds by plotting the graph of the Cheetah drums.



The waveform drawn on screen by the output that normally sounds like the Kick Drum in the SPECDRUM Kit. Note the STOP statement that concludes the artistry.

TABLE 1: SpecDrum channels, drum positions & sample sizes.

Position	1	2	3	4	5	6	7	8
Sample	2K	3K	3K	3K	2K	2K	3K	3K
Channel	1	2	2	2	3	3	3	3
File type	129	130	130	130	131	131	132	132

THE END

Well, this month's column has been very technical but I hope you've found it interesting nonetheless. The Spectrum may be four years old but it's certainly far from played out as an enthusiasts' machine. Next month I'll take a look at the *Genius* assembler from Oasis/Ocean, which promises to beat all other Spectrum machine code systems hands-down (really!). I'll also explain more about the inner workings of the 128, including — hopefully — a fix for some of the problems mentioned this month.

Your letters, on any Spectrum -technical subject, are welcome. A parcel of letters was lost, early in April, between CRASH and my Black Country hideout, so I must apologise on behalf of the Post Office and ask anyone who wrote in then to try again — as far as I know I'm up to date with all the readers letters that have reached me, and we'll used Registered post from now on. The address, as ever, is:

TECH TIPS
CRASH
PO BOX 10
Ludlow
Shropshire
SY8 1DB

WINNERS & PRIZES

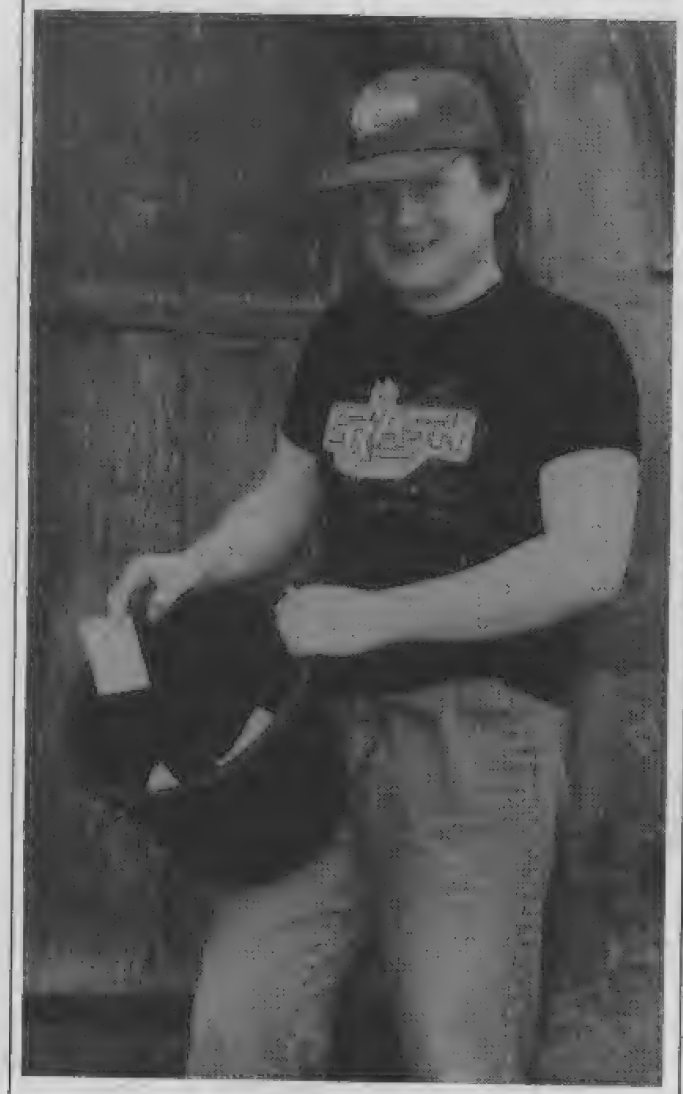
SABOTEUR MAPPING COMPETITION

Way back during the snows and general arctic conditions of February, we asked all *Saboteur* fans to come up with a map of the game. **Durell** kindly supplied a video by way of an incentive...

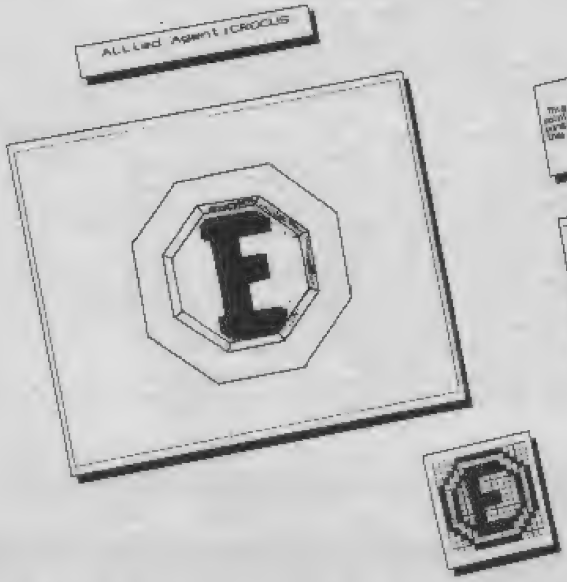
There must have been an awful lot of you snowed-in over the fist months of this year, because we were snowed-under (Copyright 1986 *Pretty Cool Link Corporation*) with entries. Due to a slight error in the February typesetting, the entry deadline was extended a little. Now, at long last, the competition has closed, the winning entry has been selected. **Kevin Payne** of Holmoak BS18 2RZ will soon be watching all the latest videos on the machine supplied by the helpful fellows at **Durell**.

Runners-up get to choose a game from the **Durell** catalogue, and should have a good few hours of free playing ahead of them.

The ten runners up who get their choice of Durell games are as follows:
Angus Mackintosh, Datmouth Terrace, SE10 8AX; Paul Heywood, Hampton Grove, BL9 6PT; A M Pugh, Birmingham St, WV13 2HH; Rusell R Semaine, Bush Hall Rd, CM12 0PZ; Nick Annies, Sallowbush Rd, PE18 7AF; Simon Lynch, Hermits Croft, CV3 5HA; Paul Messam, Belle Vue Rd, SN1 3HN; David Barrett, Mill Hill Lane, DE15 0AX; Paul Deyes, London Rd, HP3 9BD; Robert Brown, Queens Close, NR4 7PE



Captain Kidd demonstrates his amazing bottomless bucket trick while drawing the winning entries in Digital Integration's TOMAHAWK competition



BOMBJACK COMP

In the April Issue of CRASH we asked all the *BombJack* fans scattered around the country to devise a training manual for use by an assistant superhero while Bombjack went on his hols. A BombJack arcade machine is the prize in this case, and after after hours of head-scratching the faithful Comps Minion finally dragged himself out of the broom cupboard for long enough to select the winners: The Brothers **Westland — Stephen and David** — will soon have a BombJack arcade machine winging its way down to them in West Wickham, Kent. **Elite** T-shirts go to the 20 runners-up.

The runners up, whose grasp of *Bombjack* is quite evident, will soon be able to parade about in their very own ELITE SYSTEMS T Shirts. Not bad, eh?

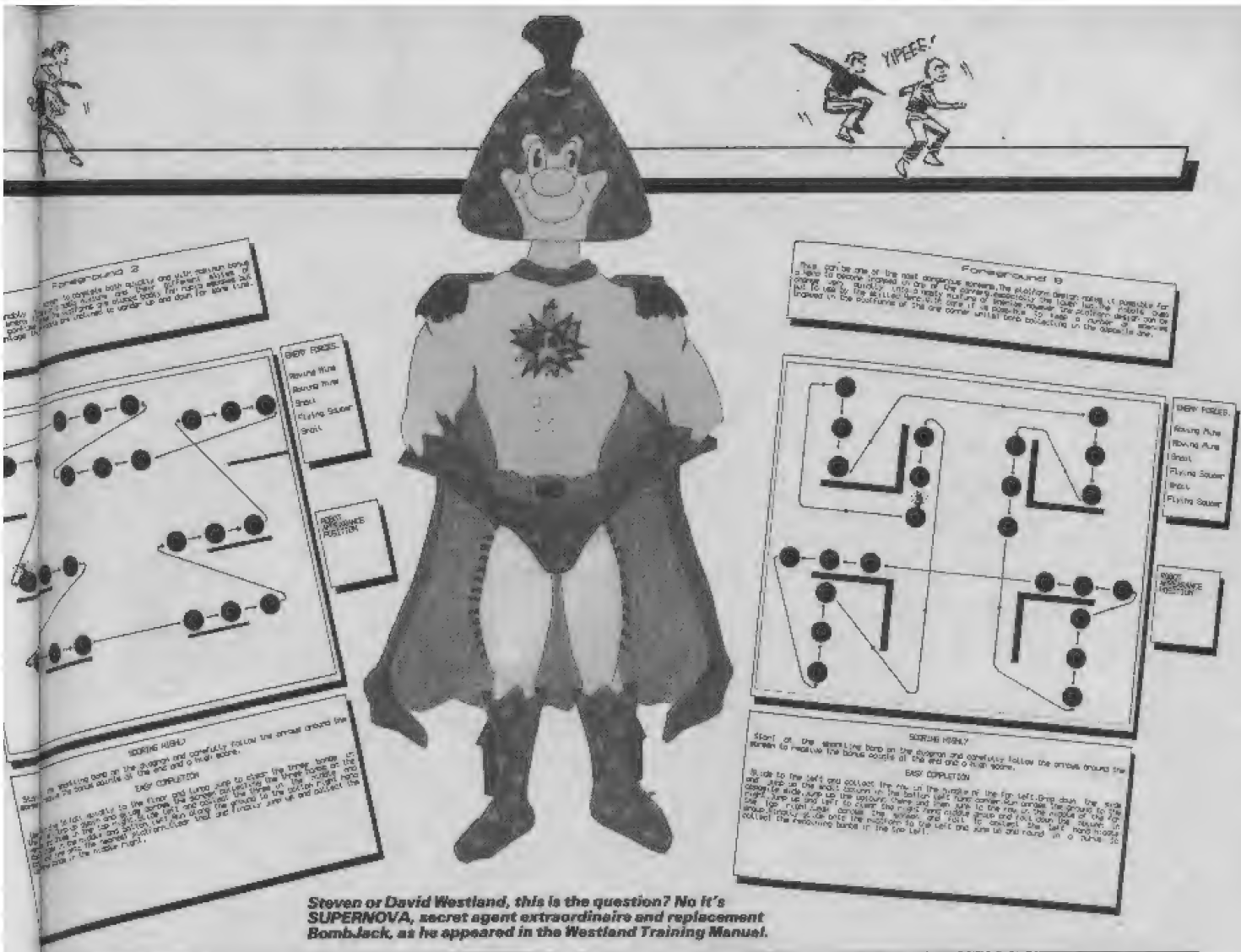
Paul Emery, Dulverston Rd, SE9 3RH; Michael Savage-Jones, Kiss-Avenue, SW4 9HG; Joel Morris, Barnsley Rudge, CM1 4YG ; Iain Miller, Station Court, KY6 4RR; Jeffery Fuge, Dundridge Lane, S55 8SN; John Hodkinson, Knighton Drive, B74 4QP; Lee Russel, Goodwin Rd, E7 0LF; Nicholas Fielder, Green Lane, ME17 4LF; John Blakeley, Wakefield Rd, LS27 0HT; Jeff Smith, The Tannery, SG9 9AR; Thomas Lennon, Kingstanding Rd, B44 8LB; Andrew Knight, Shipley Lane, TQ2 7DA; A Whitehurst, Dodthorpe, HU4 9HA; Ronald Morrison, Colinton Rd, EH10 5DF; Peter Small, Normanby Rd, LN7 6TB; Andrew Hooper, Cole RD, BA10 0DA; Paul Hewett, Burgess Green, SP1 3EL; Martin Wakeley, Orson Leys, CV22 6RF; Lisa Barrett, Wymering Rd, PO2 7HX; Steven Monks, Brindle St, PR7 3HR;

T T TT TOMAHAWK KIDS

The *Tomahawk* competition wasn't actually featured in CRASH but was run on the inlay card of **Digital Integration's** helicopter simulator. Graeme Kidd (He of the shiny red Doc Martens) drew the winning entries from an official CRASH bucket just the other day, and here they are. The first prize of a trip in a helicopter plus a day out with **Digital Integration** goes to **David Griffiths** of Raby Rd, Durham and **Martin Johnson** who hails from Foundry in Truro.

Twenty runners-up are to receive Apache Airfix model kits. The helicopter ride is scheduled for a warm spell — so sit tight winning entrants, you'll be airborne before you know it!

Airfix Kit Modellers to be are:
John Lewis, Hendrefoilan Road, Swansea; C J Biddle , Highcroft Avenue, LE2 5UG; R Nash, Watford Road, Herts; Nick Hawcroft, Oriel Bank, YO11 2SZ; Iain Morrison, Manse Road, Nairn; David Cartwright, Bowshaw, S18 6GB; J R Thorpe, Felindre, Wales; M H Watmore, Tolpuddle Way, GU17 7BH; Jason Lock, Heathbourne Road, Lancs; Mr P Lawler, Springfield Close. PO20 7AS; A B Smith, Holst Close, NR33 9BZ; P Small, Normanby Road. LN7 6TB; R Baliszewski, Leighton Buzzard, Beds; M Perman, Carsons Drive, Suffolk; Colin Noad, Peddlars Grove, Surrey; Mark Whitaker, Westfield Drive, DL3 9BB; Mr G Proctor, Gargrave Court, LS9 7EP; Phil Collings, Devon. TQ12 5HF; S L Morrison , Leam Lane, Tyne & Wear; Richard Pettican, Spindlewoods, Surrey



Steven or David Westland, this is the question? No it's SUPERNOVA, secret agent extraordinaire and replacement Bomb Jack, as he appeared in the Westland Training Manual.

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My top five programs are:

TITLE	VOTE OUT OF TEN
1	
2	
3	
4	
5	

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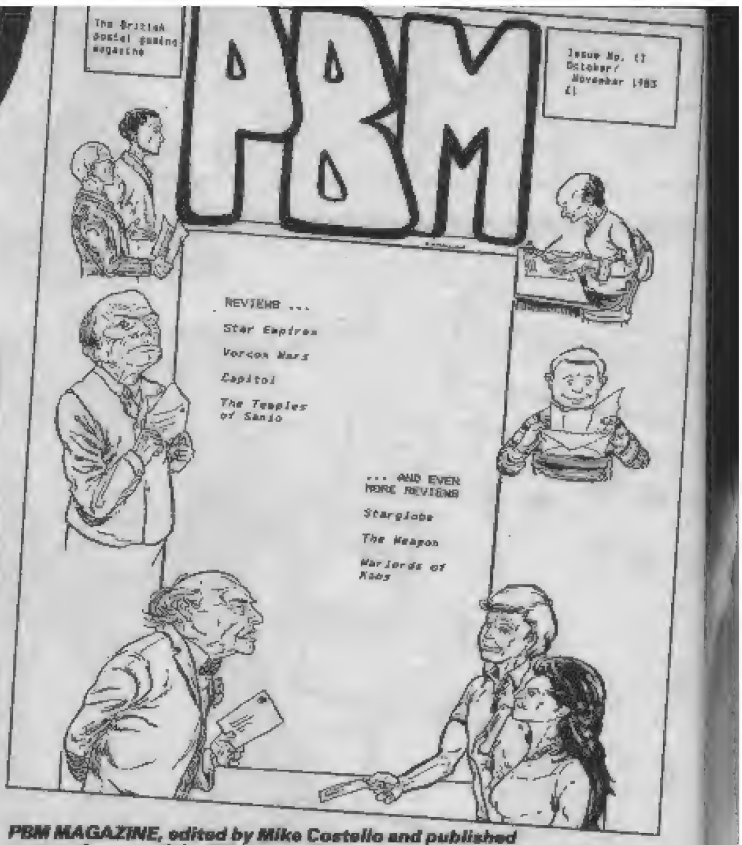
My top five favourite programs in descending order are:

TITLE	PRODUCER
1	
2	
3	
4	
5	

1986 PBM MAILBOX

This month sees the start of a new column, put together by BRENDON KAVANAGH who has been involved in the Play By Mail gamesworld for some while. Brendon produces his own fanzine — THE TELEPATH — for players of the Play By Mail Game STARGLOBE, as well as contributing a regular column on STARGLOBE to PBM MAGAZINE. Take it away, Brendon . . .



PBM MAGAZINE, edited by Mike Costello and published every other month by EMJAY at 17 Langbank Avenue, Rise Park, Nottingham NG15 5BU. £1.00 coverprice, mail order

The hobby of Play By Mail (PBM) gaming is now well established in the UK, and a lot has happened since Chris Harvey brought the PBMing bug across the Atlantic from America fifteen years ago. John Minson's report on the first British PBM Convention in the April issue set the scene: over the coming months I'll be providing a regular update on the goings on in the PBM world, as well as looking at some of the games currently available.

To begin with, I'd like to explain the main elements of PBM gaming, and outline the basic structure of the games themselves.

PLAYING GAMES BY MAIL?

A PBM game is a complex fantasy/strategy game played simultaneously by a large group of people who all use the postal system to interact with the game. To participate, each player sends orders for the current turn to the Game Moderator (GM), who is paid to process the orders and return the results to the players. Each player's results are unique and personalised, and is is partly from studying these results that a player decides on the orders to pop in the post for the next turn.

Games may be human moderated, computer moderated or computer assisted. The way in which a game is moderated affects its feel, but shouldn't affect the quality of the game itself. Players of the Fighting Fantasy type of game, for instance, tend to feel that computer moderation gives the imagination much more freedom. Conversely, space-based games generally lose out on atmosphere if the turn reports are handwritten sheets rather than computer-generated printouts.

Each moderating method has its inherent disadvantages. Human moderators — by their very nature — can have bad days, which are reflected in the standard of GMing. Computer software and hardware can suffer from disastrous bugs or system crashes that may wipe the entire game from memory. Backups are almost always taken regularly by GM's running a computer system, but the hard disk equipment needed rapidly gets expensive . . . Generally, PBM games are run well, and problems are scarce.

TURN AND TURNAROUND

PBM games either have fixed deadlines for orders or they are 'open ended'. Where deadlines are enforced, players must post their orders on or before a certain date. The GM can then process all the orders at once, and the main overlying strategy in such games involves predicting the actions of enemies or opponents in order to outwit them. Deadlines are usually fortnightly, but other frequencies do crop up — weekly deadlines are set on some games to give fast turnaround, while three weekly or monthly deadlines in other games allow international players to participate without being affected by postal delays.

Open ended games have orders processed several times a week, and have no fixed way of ending. Players may submit orders as often or as rarely as they choose, and such games usually progress rapidly. Open ended games with a fast turnaround are likely to appeal to those who enjoy quick, realtime developments more than a staggered battle of wits.

LE FIN

Play By Mail games are characterised by the long lives they enjoy — games last for years, as a PBM game is no one-day campaign. A variety of methods are used to bring PBM games to a close. Normally, a game continues until there is a clear victor or the game becomes uneconomical for the Game Moderator to run. Alternatively, points or ratings systems may be employed in a variety of ways — some games end on a set date, when players are ranked according to achievements. One game involves a secret score, set by the GM at the start, and as soon as a player reaches that mystery score, then the game ends. In open ended games, a points system is used to identify the leading players.

Ultimately, games can be closed due to acts of God (computer failure or other real-life disaster), low popularity or even total boredom on the part of the Game Moderator. Fortunately, early closures are rare.

THE DIPLOMATIC CORPS

The most attractive feature of PBM games is probably the fact that they are multiplayer games. The results that arrive on your Turn Sheet after each move can be heavily influenced by the actions of other players. Operating alone in a game, with no allies to support you, can be very difficult as well as being a bit boring. It is very important to engage in diplomacy to get the most out of the game.

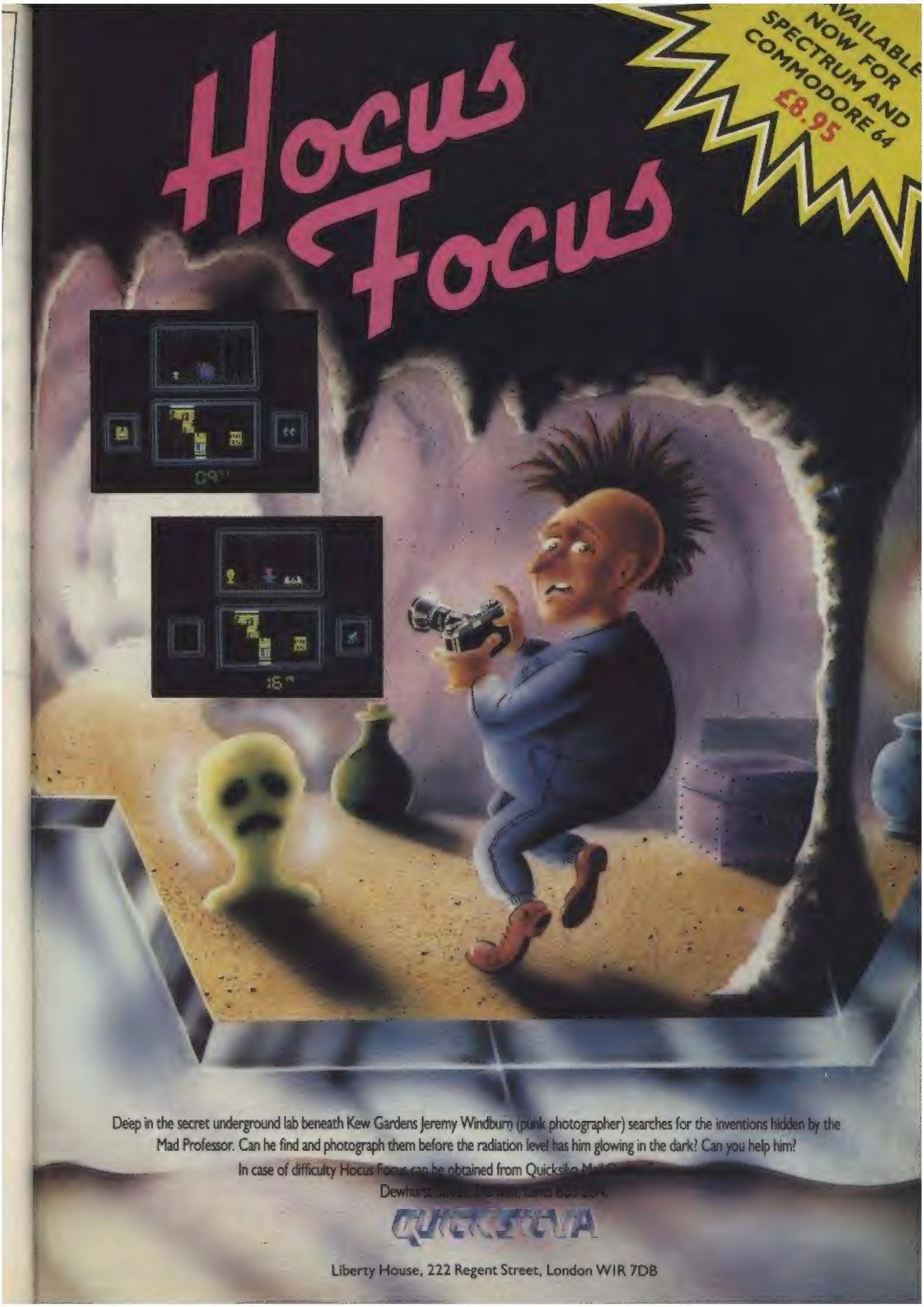
Inter-player communication, which take place outside the structure of the game itself as laid down by the Game Moderator, is termed Diplomacy, and involves direct contact between players by telephone or letter. Cunning Diplomats do well . . .

The art of Diplomacy involves a complicated process of bluff, double bluff and negotiation. The aim is to extract information from fellow players, to make alliances or enemies, to double-cross allies, and to indirectly manipulate other players. Diplomacy is also commonly used to plead for mercy from a superior force! Very complex relationships can develop between the players in a game, and the behind-the-scenes manoeuvering can often become as much fun, if not more fun, than the actual gameplay!

NEXT MUNF

Following on from this brief introduction to the mechanics of PBM games, next month I'll take a close look at a single game — VORCON WARS. This is perhaps the best introduction to PBM gaming around at the moment, and I'll examine the game in depth for the benefit of readers thinking about taking up the hobby of playing games by mail.

Meanwhile, please don't hesitate to drop me a line at PBM MAILBOX, CRASH Towers, Ludlow, Shropshire SY8 1DB — I'd like to include game tips and letters in a PBM MAILBOX FORUM, and it's up to you to help out!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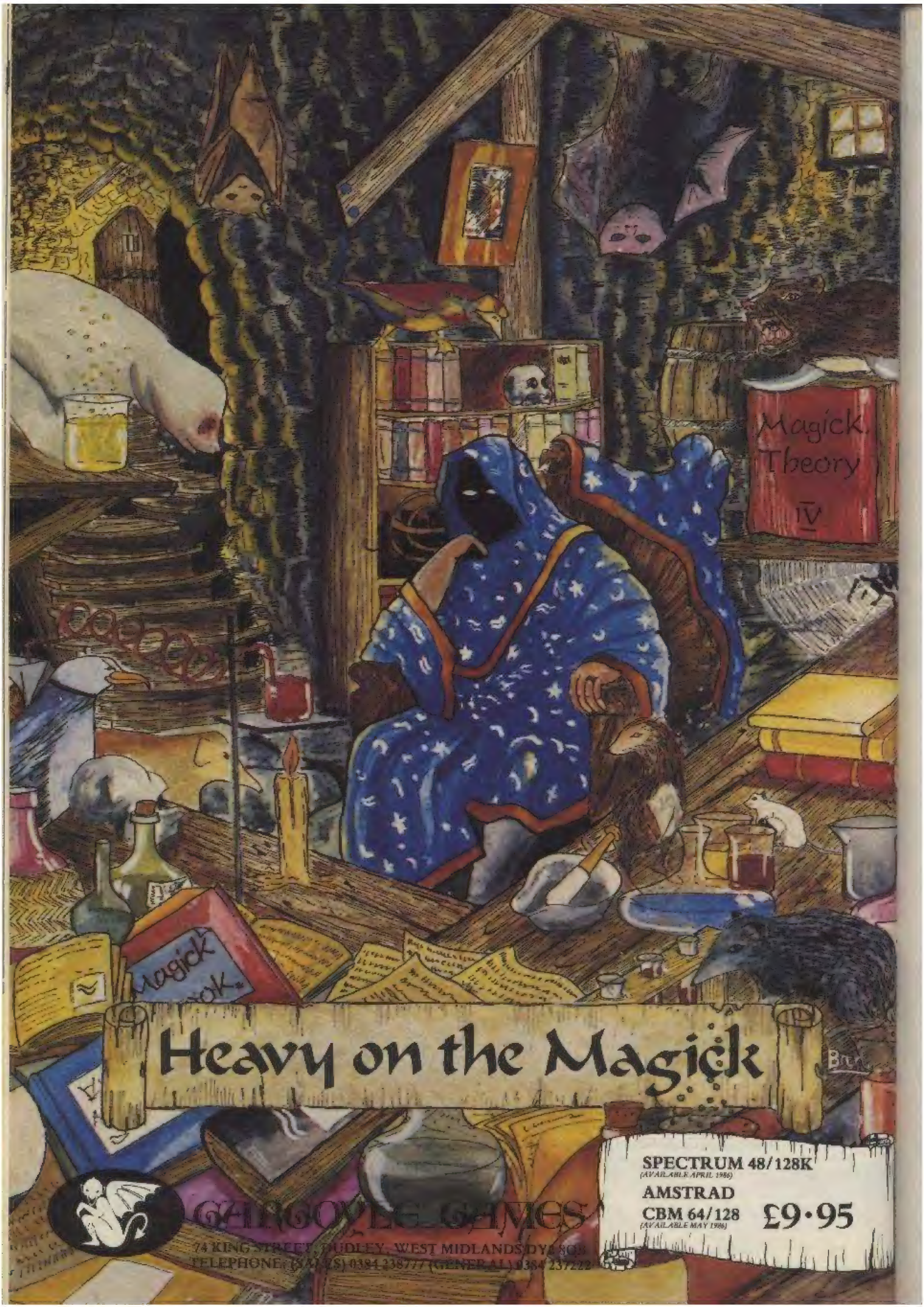

Heavy on the Magick

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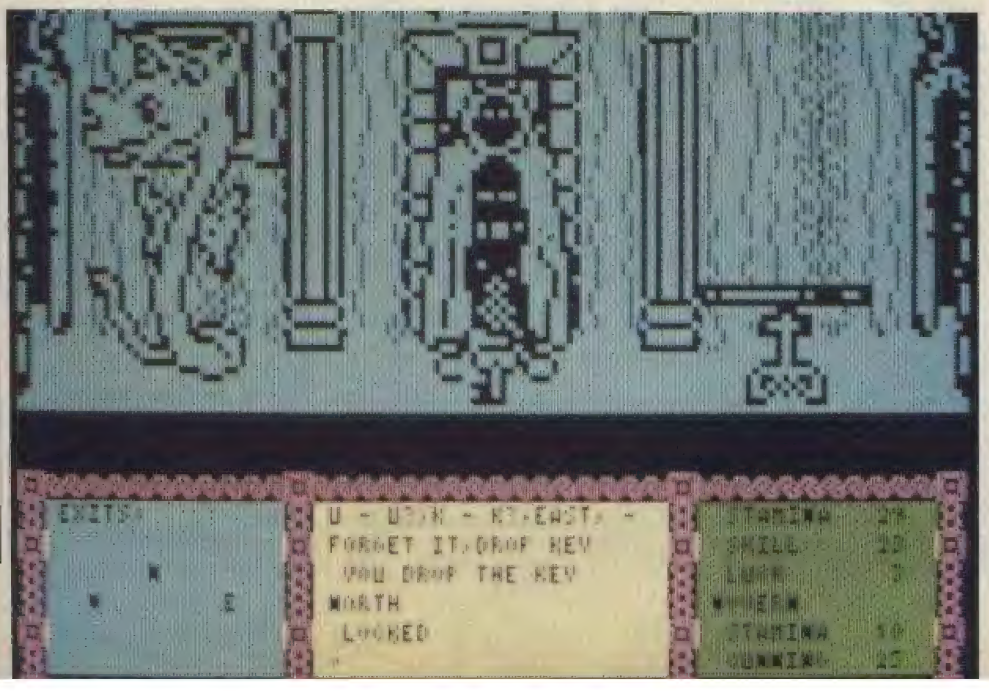
DEREK BREWSTER'S

Adventure Trail

Axil finds a key on a table as the central status window reveals. On the left, in the blue window, the exits available from the current location are revealed, while Axil's personal status in terms of Stamina, Luck and Skill are displayed



A CRASH Smash

HEAVY ON THE MAGICK

Producer: Gargoyle
Price: **£9.95**
Authors: **Carter & Follis**

Music on the Spectrum has never been a matter to crow about, what with the likes of the Commodore, Amstrad and Atari machines tunefully serenading the high street store customers, but here Gargoyle have produced an intro tune which improves and becomes more complete the longer you leave it playing on the introduction screens. The player is further seduced an animated loading screen — the first I can remember seeing. Many of the pictures you will meet during the game are flashed up around the screen as a loading counter ticks down from over 750 in the bottom right-hand corner.

The options on loading up are commendable and are an insight into the complexities and depth of the game. *Magick 1* sees you start a brand new game, *Save Game* and *Restore Game* are the standard options, while *Save/Restore Axil* (the

Death greets Axil in the furnace. AAARGH!

The Demon BELEZBAR has just been summoned — it's the nasty fly-eyed greeblie on the left of the main viewscreen

main character) and *Realign Status* are welcome additions. This last allows the player to alter the values for **Stamina**, **Skill** and **Luck** randomly attributed to our hero at the start. Pressing the 6 key has the values swapping around from their inherent bias towards a high Stamina, much lower Skill, and very low Luck so that you might prefer and select a high Skill or a high Luck. Typical starting values for Stamina, Skill and Luck are 33, 8, 3 and 35, 12, 4 showing that your total points tally does vary along with their distribution. You always, however, begin with zero experience points, and are saddled with the far from glamorous grade of Neophyte, a very lowly wizard barely competent with spells.

The first frame gives an idea of how all the information in the superb supporting booklet (the best I've seen since *Lords of Midnight* in terms of playing details and imaginative storyline) might be enacted. Axil the Able stands between two tables with what look like, and indeed are, books perched upon each. I say 'look like' because herein lies one of the few drawbacks — and a minor one at that — to the playability of this game. The picture is formed by a method Gargoyle have made their own; the screen is formed in memory and blown up onto the screen as a way to conserve memory and so allow a longer and more detailed adventure. Because of this, the scale of the picture is enlarged and the definition is reduced, with the result that individual pixels become conspicuous and objects become that much more difficult to identify. The playablility is saved though by the use of the EXAMINE OBJECT command which not only tells you of the nature of the object but in what way it might prove useful or otherwise harmful. Objects can be harmful by being poisonous or by simply draining Stamina by way of their excessive weight.

Watching the first frame for a while familiarises you with the windows of information along the bottom of the screen. The debut location is a good place to do this, as in other localities various nasties suddenly descend upon you making your task, and your very survival, a difficult business. Your character, Axil, stands between the tables in a long cloak which he ruffles impatiently, waiting on your next move. Waiting long enough here you will also notice this rustling of garment actually takes up Stamina as a click, marking the loss of one unit every few minutes, lets you know.

The first frame is quite useful for showing how one or two of the simpler aspects of the game work. The ever-useful EXAMINE OBJECT invoked, as with all commands, by a key word (in this case brought up onto the screen by pressing X) takes Axil behind the desk to the left and tells of a table pitted with woodworm which holds a book. PICK UP BOOK, enacted by pressing P and spelling out BOOK (all words following keywords must be spelled out in full — no easy matter with words like GRIMOIRE knocking around) has Axil on screen picking up the book with one of many superb and life-like animations. Alas, the book is smeared with poison and your Stamina rating takes a quick tumble. (Incidentally, PICK UP object gives 'You can't lift the table')!

The choice of exits at the start is between east and west but in later screens there can be many exits, a little arrow indicating whether any lead up or down, eg NE ↑ would indicate that the NE exit takes you up a level. Another symbol you will meet sooner or later is the flashing of a direction marker, which indicates that a nasty is approaching from that compass point. Apart from directions, the left hand window can also hold information on the level you happen to be in and the objects you are carrying (after picking up or putting down of an object).

One point which I either didn't quite grasp, or which is a genuine failing, is the inability to speed up the game. Each frame begins with a description of the locality eg 'You are in the Sothic Complex on Level 2' which remains on the screen for nine seconds. This is a long time if you want to zip around. Perhaps I just missed the description of the key which speeds up this process in the manual. However, if you know where you are going, you can by-pass readouts by using the multiple entry system whereby words separated by commas and entered as a string are acted upon at once. Separated commands can be interrupted by an attacking monster.

Heavy on the Magick is something that has been promised to the computer games world for some time but until now has never quite materialised. It is an adventure, certainly, but is animated to the extent where it will appeal to a whole spectrum of games players. The incredibly lifelike movements of the main character, and the cuteness of the monsters, should find a very receptive audience just dying to get their hands on this one.

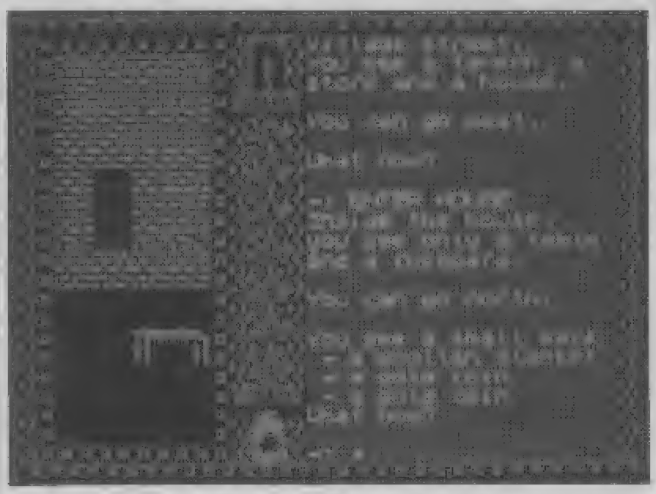
COMMENTS

Difficulty: very playable, not easy to complete
Graphics: unusual blown up pictures featuring superb animation
Presentation: smart
Input facility: keyword and sophisticated multiple entry system
Response: fast
General rating: an original, animated adventure

Atmosphere	9
Vocabulary	9
Logic	9
Addictive quality	9
Overall	9

THE TERRORS OF TRANTOSS

Producer: Ariolasoft
Authors: **Ram Jam Corporation**



In the house, where gold and a blanket may be found — useful items on the quest to eliminate Trantoss

It's at times like these that I wish I'd marshalled my back issues of CRASH into some semblance of order, perhaps with the help of those binders lost within the plethora of sweatshirts and peaked caps to be found in our beloved magazine. It has been stated by many a more academic devotee than myself that the universe is becoming more chaotic, not due to man's struggling with Sunday trading or the thinness of bin liners, no, but to some innate Physical Law, an inescapable truth even outside university Physics departments. The best laws can only be disproven by travelling to the very edges of the universe and proven by simply opening one's eyes. This idea of the whole works spiralling into a state of devilish disorder is indeed a good one as the evidence does lie right before me — on my desk to be precise. Someone once said (or was it scowled?) an untidy desk is a sign of an untidy mind and this is borne out by the unruly state of my desk when compared to that of my bank manager's.

This lengthy introduction you might be surprised to discover is indeed an attempt to outdo that lengthy discourse which preceded a rather favourable review of Ram Jam's last adventure, Valkyrie 17, reviewed way back in a month with notables such as *Return to Eden*, *Twin Kingdom Valley*, *Out of the Shadows*, *Tower of Despair*, and *Eye of Bain*. Such months are, alas, conspicuously rare these days. As you may gather from the intro to this piece, it took me quite some time to discover this all happened way back in December 84.

Let's look at the bumph behind this one now because it seems to me we both need a rest from long discourses on disorder in the universe.

In the region of Hapshal, south of the dark mountains of Mortran, lies a small village on a road that leads to a far off city. Sinister things were happening during the hours of darkness, as each night when the villagers locked themselves into their homes a few of them would have disappeared by daybreak. Ancient legend told of an evil Xyradd called Trantoss, one of the undead who was banished to the far off mountains with all his powers removed by the long dead Wizards of Vane. The legend told of a golden mace that gave Trantoss his powers. This the wizards smashed and the pieces were scattered over the mountains.

Now, the wise men of the village believe, Trantoss must still be alive and he must have collected together the pieces of the mace. His power is returning. All they can hope to do is to destroy the mace once again before all his powers return. They need a brave man to venture along the lost paths into the mountains. None of the villagers are prepared to take the risks involved until, one night, two brothers awake to find the rest of their family has disappeared into the darkness. These two, Lobo the woodcutter, a large, slow man, and his brother Scarn, a nimble chap of dubious character, agree to go on the quest. You join the plot as they are equipping themselves in the village and your job is to guide these two disparate characters.

That's better, I feel quite refreshed and ready to get stuck into this review now.

Loading up, you are presented with a most impressive and professional display composed of three main parts. On the left is a tall, thin picture of where you stand. The pictures here are detailed and informative, given their very limited area. In the middle is a column symbolically depicting the two main characters Lobo and Scarn with the chap currently playing highlighted in yellow, and the other either green when in the same location as the chap playing, or blue if he has found a place of his own. During play the two brothers can be parted and joined to suit the style of play in any one instant.

The story is read from a scrolling column on the right of the screen, which is where you input as well, and tells of your travels from a village street with tavern, store and house to the forbidding mountains beyond. Inside the store the storekeeper bids you to take all you need for your quest and you'd have to be pretty ungrateful not to take many of the things he offers — which can be achieved with the ever useful GET ALL command. Inside the house are a woollen blanket and a couple of gold coins but these are soon augmented with the things from the cupboard which is seen to open in the picture — always a welcome addition. It is in the tavern where a real advance is made and you begin the adventure proper, but I'll leave you to discover how to proceed and how to deal with the dog found a little further along the way.

Terrors of Trantoss is a very professionally produced adventure with an attractive display and graphics. The character set has been tastefully redesigned to fit neatly into its column on the right of the screen, looking much smarter and more compact than the usual sprawling Spectrum text. The game is very easy to get into, being eminently playable and making up for any perturbations caused by its lack of an effective EXAMINE command and the adventure's slow, plodding pace. The control of two very different characters showing widely divergent attributes adds that little something to gameplay as you swap from one to the other in order to tackle different problems. All in all, a very worthy release from the **Ram Jam** team.

COMMENTS

Difficulty: easy to get into
Graphics: good
Presentation: appealing and a little different
Input facility: verb/noun
Response: slow
General rating: very interesting

Atmosphere	8
Vocabulary	7
Logic	8
Addictive Quality	8
Overall	8

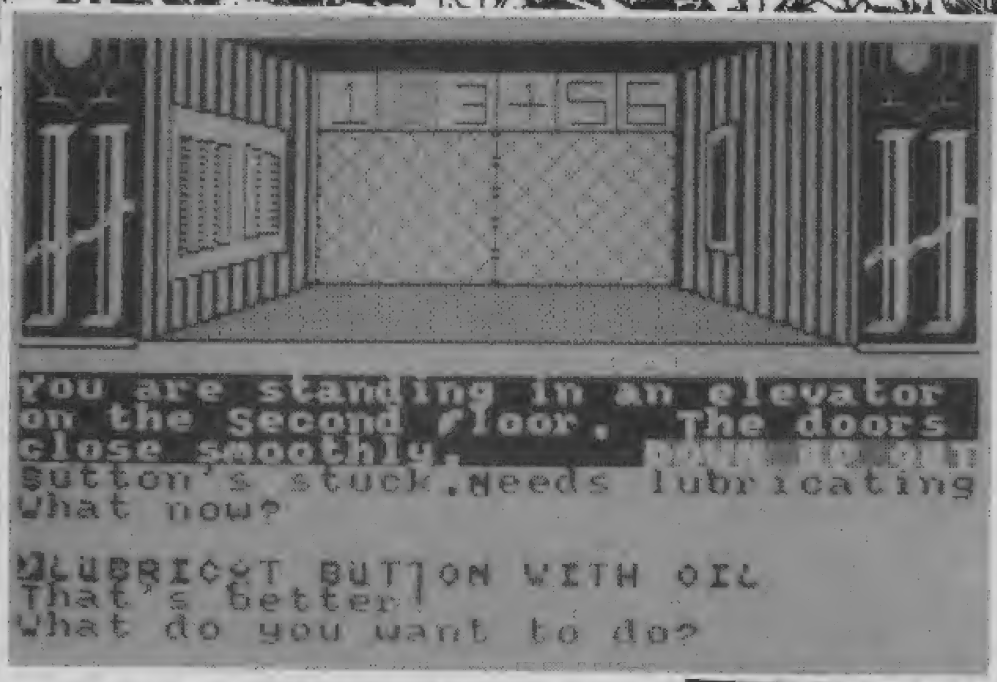
THE ELEVENTH HOUR

Producer: Venturesoft
Price: **£3.99**
Author: **Terry Braverman**

The newspapers proclaim 'Bomb scare at Harridges' and fear pervades the air as fleets of ambulances stand by. The janitor of Harridges, driven mad by years of low pay and humiliation over his lowly status, has finally gone stark raving bonkers. As a final, desperate act of hopelessness he has planted bombs in locations throughout the enormous department store. Toting a loaded shotgun he shuffles between floors reflecting on his predicament. The store will be reduced to rubble in the eleventh hour.

You play the bomb disposal expert. Unarmed, you enter the store and must overcome the problems with the many lifts and defuse the bombs. All the while you have to keep an eye out for the demented janitor. The bombs are set to detonate at predetermined intervals: you have plenty of time to find them but calculating exactly how to defuse the devices will prove difficult and time-consuming. If you are caught on the same floor as an exploding device then say your prayers — if a bomb goes off on some other floor then all might appear fine, it's just that the structure of the whole building deteriorates with each blast. Care must be taken not to cause a bomb to explode by accident as they are fiendishly concealed about the store by someone very familiar with the layout of each department.

As if all this as not enough to contend with, there is a time limit of 660 minutes (in reality 660 turns) in which the bombs have to be defused, and the game is interrupted at regular



intervals by our frustrated and clever janitor posing the kind of questions which are some indication of his undoubtedly high IQ. The realisation that the game gets more difficult is rather demoralising, should you find yourself struggling; after 450 minutes the game decides to give you an even rougher ride the worse you are doing!

Eleventh Hour has some very good pictures dispersed throughout the game, giving the atmosphere something concrete around which to coalesce. The redesigned character set is another plus and *The Patch* adds sound even if many of *The Patch*'s utterances are grafted onto the plot — train sounds where there are no trains, and the most musical dripping tap I've ever heard! The RAM SAVE is, as ever, useful and the EXAMINE command is used to good effect.

Eleventh Hour can be purchased by mail order from Venturesoft at 23 Aragon Close, Kings Hedges, Cambridge CB4 2SU.

COMMENTS

Difficulty: moderate
Graphics: very good
Presentation: nice
Input facility: verb/noun
Response: fast *Quill* response
General rating: good value

Atmosphere	7
Vocabulary	7
Logic	7
Addictive Quality	7
Overall	7

EXTRICATOR

Producer: Precision Games
Price: **£2.99**
Author: **P & C Hoar, D Hayter, S Boral**

You are an Earth agent working for a top security company on a government assignment to infiltrate the Star Fleet Command HQ on the planet Arg. Once settled, you are to extricate a Prof Roberts who is imprisoned in the detention area of the Complex, known as the Green Sector. Reaching the Green Sector is difficult enough, but it is also necessary to deactivate the shuttle bay security system by sabotaging the main computer. This being done, a time limit is set, its end marked by the completion of the repair of the security system by which time the professor should be through the shuttle bay and off the planet. When the time left is really low, a warning klaxon sounds out signalling a most worrying lack of moves left for your escape.

Before I forget, I should mention that this game has something exotic on the flip side. *Frantic* is a specially written piece of music by Baz Hoar. It is unusual in that no actual instruments have been used in its recording as all of the sounds have been digitally sampled through a Spectrum micro and played back through the Spectrum's own keyboard and then multi-tracked on a Porta-Studio. Hearing the music, it's impressive to note that no other external effects were used.

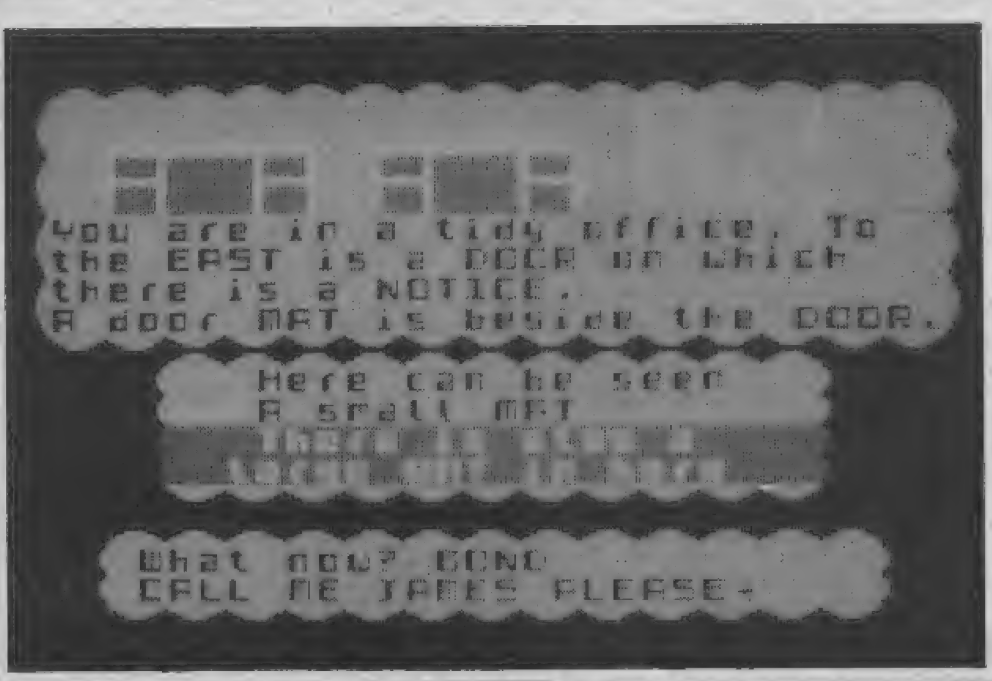
Back to the adventure which is *Quilled, Illustrated* and *Patched*. This last utility ensures RAM SAVE and sound effects, but the game in addition offers the opportunity to alter the typeface. Although any change to the Spectrum capitals might have been thought an improvement, I rather thought that the home grown typeface offered was, if anything, worse and less distinctive.

You kick off this one on an alien plain with purple grass swaying in the breeze. The only exit leads south but travelling south, the only way to go is back the way you came. Clearly you 've missed something and that something is literally staring you in the face. Clues in graphics are very much my idea of good and imaginative adventuring and this game has already made a good impression after only a few opening frames. Since I've given this part away I feel restrained to give no more at this point so take it from me that in the next instance of getting somewhere the game demonstrates another welcome feature with a persistence of an activity paying off handsomely (and no, I don't mean WAIT which would not count as such an interesting feature).

Extricator is a rather good adventure for £2.99. Amongst its many strong points I would count its sense of humour (for instance, the Sony Walkman bedecked skeleton), the clues hidden within text and graphics, and the pleasantly informative EXAMINE command as the most praiseworthy. The problems are within the ken of even an average adventurer but watching them go down still provides a considerable amount of pleasure, which is what adventuring is all about.

Difficulty: easy for quite some way
Graphics: good enough
Presentation: nothing special
Input facility: verb/noun
Response: fast Quill response
General rating: many praiseworthy features

Atmosphere	7
Vocabulary	7
Logic	8
Addictive Quality	8
Overall	8



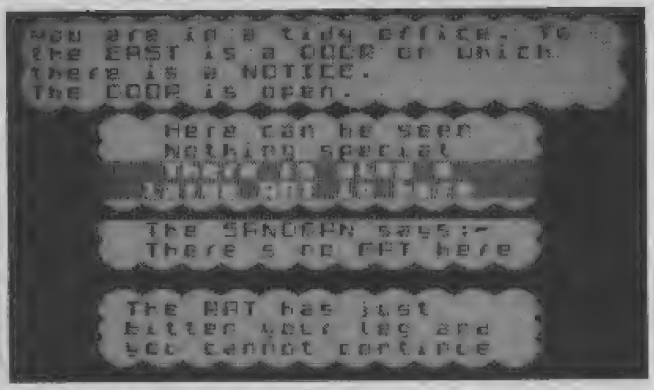
potential agent's armoury from the Agent Training School. Your task is to be completed within six hours.

Before you load the main program (following the instructions) you are asked for 'Pictures on or off?' Also, a very helpful note tells you to start your map at bottom left of your paper. Whatever else might be said of this adventure it certainly knows how to be polite and knows how to woo the weary adventurer.

COMMENTS

Difficulty: difficult
Graphics: average
Presentation: good
Input facility: v/n
Response: sluggish
General rating: good value

Atmosphere	7
Vocabulary	6
Logic	6
Addictive Quality	7
Overall	7



SPY TRILOGY

Producer: Tartan Software
Price: **£2.50**
Author: **T D Frost**

This set of three programs was devised using Tartan's very own *Adventure System*, a programming aid which can be used by anyone conversant with BASIC who has no desire to purchase the more expensive utilities on the market (Tartan's system only costs £4.50). Machine code routines are used but these are generated from a code generator program and no knowledge of machine code is required to make use of the system. The game, *Spy Trilogy*, might also be seen as an advert for the kind of things the utility can achieve such as split-screen scrolling and RAM SAVE.

The three linked adventures must be completed in the correct sequence. At the end of each you are given a code word which enables you to proceed to the next adventure. Time is an important and limiting factor, so to make things a little easier to begin with the clock is switched off in the first two adventures. Further encouragement lies in the fact that a practice mode is offered on the first game which leads into a real game once the 90% mark is reached.

There's a bit at the start of this game — I'm not sure whether it is a joke or something which is explained later on. The program asks for your name, you dutifully type it in, and then the game immediately starts with your name, Bond (he of the leggy sports car helicopter movies). You have decided to apply for the secret service. To weed out those with enough sense to avoid risking their lives playing with poison darts and the like, you are exposed to a suitability test. This tests your intelligence, aptitude and application of logic to the very limit. You are placed in the simulated situation of having to collect five items of a

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SIGN STUMPS

Simon Williamson **from South Wirral writes:**

"Please help me! I'm stuck on SUBSUNK by Firebird.
1) How do you enter the cold room and get the food, without being gassed by mouldy potatoes?
2) Where do you find the bottle containing aspirin?
3) How do you open the medicine cabinet?
4) Can you open the packing case found in the locker room?"

To protect yourself from the mouldy potatoes you need to wear the Old Spies After-Shave found in the case. To open the case GJSF HVO BU DBTF. The aspirins are, as you would guess, in the medicine chest which is opened using the QBQFS DMJQ found on the DBOUBJOT EFTL. QJDL MPDL.

Christer Andersen **from Denmark is having problems with HEROES OF KARN and asks:**

"How can I get rid of the person preventing me from getting the money needed to bribe the guard later?
What use is Beren the King?
What use is the bible?"

The money is guarded by a Barrowight. You must LJMM CBSSPXJHIU XJUI CJCMF and then take the money. You will find Beren useful later on in the game. I would like to thank *J. Pennington* ***of St. Helens for providing help on this game.***

Chris Tanner **and** *William Bulman* **are having difficulty in** Level 9**'s excellent RED MOON and write:**

"There are three problems which prevent us getting any further, these being the chasm, the room with blinding lights and all rooms with water involved.
We think that the acorn and the scroll will get us across the chasm and that the gas mask and tubing have some relevance to the flooded rooms. Another problem is how to save Kellf the Human from dying of thirst."

To prevent Kellf dying of thirst simply GJMM B CPUUMF XJUI XBUFS and take it to him. To pass the chasm, drop the acorn beside it. To travel underwater you will need a GMBTL as well as the gas mask and the tubing. As for any troublesome lights, the black ball could prove useful.

Richard Leadbetter **of Witham, Essex asks:**

"How do I buy the claw hammer and screwdriver on EMERALD ISLE? I have found the treasure by the palm tree and lit the lamp. What do I need to pay?"

Go to the DBS QBSL and get the XBMMFU. Take this to the QPMJDF TUBUJPO and you will receive a reward which can be used to buy the items.

Several adventurers have requested help on MINDSHADOW, being unable to progress any further after getting aboard the ship.
Andrew Riley **in Essex provides the following help: Once aboard the ship, go N, W, S into the cabin and kill the man, go into the kitchens and take the meat cleaver. Next go to the lifeboat and take the canvas out. Find the anchor and cut the chain. Go to the plank and walk across it into the Royal Navy Vessel. You have now completed part 1.**

This month a couple more adventurers are stuck on KENTILLA. *Robert Holt* **from Rochdale writes:**

"I was playing KENTILLA and using the tips that I could find in back issues of CRASH. But I still cannot find the Iron Rod, Gold Key or the Troll's den.
Please could you help me find the above and could you also tell me how to use the yellow scroll, how to get the green scroll from Zelda's lair without dieing and also how to fix the wooden boat when you try to get to the black tower as I always drown in the sea,due to the boat sinking.
In a back issue you say that there is a conch shell on the beach. If this is so then I cannot locate it, so could you tell me how to get it."

To prevent Zelda from roasting you, you must rescue Timandra and take her to Zelda; you can then get the scroll. The wooden boat cannot be fixed, but the silver chalice can be used to bail out the water. To find the conch shell you need to dig in the sand.

On the same game, *D Angelone* **in Belfast asks:**

"How do I obtain the key that opens the chest in Tylon's castle. The Oracle says 'Greko can't be beaten without Velnor's staff' where is it?
How do I obtain graphite to cast the Fire Protection Spell?
What use is the talisman in the adventure?
How do I get past the ward of disintegration?"

The key to the chest can be found in Tylon's bedroom by examining the bedpost. Velnor's staff can be found in the chest and this staff is used to pass the ward. To obtain graphite for the spell SFNPWF EJBNPOE GSPN UBMJTNBO XJUI TXPSE and then heat them in the furnace.

Darren Hogg **of Leeds is having trouble with** Firebird's ***THE HELM*** **and asks:**

"Is it possible to enter the small store hut south of Cocklehampton?
Please, please, tell me how to cross the narrow gorge."

It is possible to open the hut. First you need the rope and the hook, then UJF SPQF, go to the well and HP GJTIJOH. You now have the key. By digging at the appropriate sign you should be able to find a board to enable you to cross the gorge.

C Moore **from Middlesbrough is stuck early on in THE HULK being unable to get any further than the high gravity area.**
Although it appears that you keep returning to the same place, in fact there are several domes which look the same from the outside. Entering these is the key to progress.

ENCRYPTION CORNER

It's easy to speak Brewster!

ENGLISH : ZABCDEFGHIJKL
BREWSTER: ABCDEFGHIJKLM

ENGLISH : MNOPQRSTUVWXY
BREWSTER: NOPQRSTUVWXYZ

SUPERHEROES

C Davies **from Hambleton, Near Blackpool is this month's first SUPERHERO, completing Silversoft's ROBIN OF SHERLOCK on the morning of April the first. The final message was:** *"Well done! Shrieked Lestrade after he had restored Hurn to his rightful position. The case was over, though it was true that Moriarty later escaped and left the forest."*

Marian arrived and she and the rest of Robin's Merry Men went down to the tavern to Indulge.

Our second SUPERHERO of the month is *Stacey Beaumont* **of Enfield who completed THE MURAL from the FOURMOST ADVENTURES tape on the 28th of March and received the following message:** *"Well done! You have successfully completed the task set you, and so have won a week's holiday for two in the Bahamas. All you have to do is pay travelling expenses and hotel fees. Also spending money may be useful. You have the everlasting thanks of Hairy Tightmouse Board of Censors. May Wegan go with you. Roger and out. Care for a Sarny."*

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UNRAVELLING THE TANGLED WEB

Dear Derek,
I thought I'd give you a few more helpful routines along the lines of *D Foster's* (Issue 27). This routine prints a vocabulary list for Adventure International's excellent SPIDERMAN. Unfortunately, some of the words will be joined together, but it isn't too difficult to decipher: (Remember — CLEAR 24500 before you start).
First LOAD the main block of code (after the 'logo' file) then

```
10 FOR N = 36891 TO 38200 :
LET Q = PEEK N : IF Q > 64 AND
Q < 91 THEN PRINT CHR$ Q ; :
GOTO 12 11 PRINT 12 NEXT N
```

Use this routine to achieve the same thing in SMUGGLER'S COVE (alright, I know it's a bit old, but it's not bad really).
LOAD the main code and type:

```
10 FOR N = 40235 TO 41438 :
LET Q = PEEK N : IF Q > 64 AND
Q < 90 OR Q = 32 THEN PRINT
CHR$ Q 12 NEXT N
```

On SPIDERMAN I cannot get any further than printing the newspaper and storing its gem. On SMUGGLERS COVE I cannot do anything to make the donkey chase the bag of carrots after harnessing him to the lift.

Joel Morris, Chelmsford

In SMUGGLERS COVE enter the lift and then throw the carrots.

DB

DEALING WITH DUNGEON DENIZENS

Dear Derek,
After reading your review of PSS's SWORDS & SORCERY I rushed out and bought a copy. I agree with your review apart from the fact that you thought the input system was awkward. I found it awkward at first but I have soon got used to it.

Anyway, here are a few tips for this excellent game:
1) When training a character don't bother with Villa or Hubris. So far I have not been able to pick a lock and I have only sensed a pit once.
2) When arming your character it is best to choose these weapons: a sword, a shield, and some armour. Always choose the armour last as it uses up all your dragons teeth.
3) The only monsters worth talking to are the Armoured Warriors. These can usually be made to surrender by doing a bit of boasting until the monster starts to grovel. Then try 'surrender' on them. If this doesn't work try threatening them. Don't use insults as monsters don't like being called a zit-infested dung heap etc.
4) In the room, that is the eastern end of the north side passage, there is a cup. If you try to leave the room with the cup then you will be attacked by a cat warrior. If you kill the warrior then another one will appear. This will go on for quite some time but it is a good chance to boost your magic or fighting skills.
5) In the Coal Shed there is a staff. If this staff is used it will deplete your magical strength. However, if you hold the staff then your strength is boosted making two more spells accessible.
6) Finally, here are a few general tips. The password (wherever that comes in) is coal, I think!

If a cup is dropped in the Banquet Hall then the word 'Ring' appears. Something happens but I don't know what yet. The crowns that are found in Quadrant One don't seem to do anything though I could be wrong! I have found no use for the amulets or pendants but be careful when dropping them as they tend to cause any object that is dropped on top to disappear.

Don't use your gold for bribes. It is best to store it in an empty room as it may come in handy in the village.

If the contents of a bottle taste of peppermint then save them until you are fighting a monster much stronger than yourself. Then if you drink, your maximum number of hits will be decreased by about ten. This doesn't always work because some bottles contain peppermint flavoured poison!

Allan Price, Leeds

WHO'S MERP?

Dear Derek,
I have purchased a copy of SWORDS & SORCERY, having copies of D&D, AD&D, MERP and RUNEQUEST already. I have to say that it is a very good game made infinitely better by the add-on modules that will be available. There are a few bugs (taste the bottle in the dining room and the game crashes; when you die in the 3rd quadrant press the movement key to appear on the other side of the moving walls). I think the talking sequence could be better having only been able to talk to two room creatures. I think there would be an opening for a two player game having only six game keys to use and split screen. All in all, it is in the spirit of role-playing games, though something to have checked magic items would have been helpful.

Now for some tips. Smashing open chests increases strength while 'pick' and 'open' increase thievish ability. There is a magic staff that increases spell points and ability on the second room up on the right hand side. You must be mainly a magic user to use it so don't use it otherwise, it drains spell power to kill creatures outright and eventually kills you.
Here are some attack and defence results:

DODGE stops LUNGE, THRUST
STAND not a good defence
PARRY stops HACK
SHIELD sometimes stops HACK, LUNGE, THRUST
ATTACK any damage inflicted on you also taken by the attacker
HACK can slay outright a RETREATING foe
PUNCH Okay until very good at unarmed combat, when MAIM begins to appear. Other attacks and defences are KICK, BITE, BLOCK, GRAPPLE
VILLAINY if you attack a monster first, your villainy and to their hostility increases.

A good way to build up strength is to go to a guard room and keep going in and out to get lots of skeletons. For every three monsters you kill you can get one point on magic or combat skill depending on which menu you used last. This way, until your food runs out (a bug in the starting routine I think), you can batter them.

Drew Dubber, Lincoln

There should be a few more SWORDS & SORCERY tips in Hannah Smith's Playing tips this month, space permitting. I understand she's been talking to the game's author.

DB

STEALING TREASURE, SWINGING AXES AND GENERALLY HAVING A GOOD TIME

Dear Sir,
After reading April's CRASH I decided to write to you. I've been playing RPGs for some time now and I wonder if *Duncan Hayes* has ever escaped from a dungeon. I think not if his letter is anything to go by.

Any RPG character would look around and maybe listen for clues before charging at a tower, even the most stupid ones. Anyway, he would journey with other people and they would stop him charging at the tower.

The whole idea of RPGs is playing with other people. This is where computer games fall short. To get nearer to RPGs games would have to have an extremely intelligent input system to cope with almost any command the player types in. The player should be able to explore most of the game by solving the occasional easy problem. There should also be a few hard problems essential to completing the game. The descriptions should be long and detailed with occasional high quality graphics.

The most important thing is intelligent computer-controlled characters that the player can have conversations with, but I suppose games like this are a long way off.

Another way is multi-user dungeons, but for MUDs you need a modem and they are expensive. Just imagine an adventure game with 99 other people. Stealing their treasure, talking to them and hitting them with axes . . .

Holding conversations can be brilliant as you can say anything you want, not just what a programmer wants you to say.

A John, Cleveland

HOW TO DESTROY KORDOMIR

Dear Derek,
After reading *E Long*'s letter last month I decided to send in the rest of the solution to Firebird's RUNESTONE. After gaining the spells from Chrona, ask Questor for help and he will tell you that there is a lake in the deserted land which will restore your strength when you drink the water. Go to the lake and restore everyone's strength. Now go to Krilloth's Tower and rescue everyone (it is more than likely Greymarel will have been caught and you need him to complete the game). Then go to the lake and restore everyone's strength again. Change to Greymarel and take everybody to Gruk's Tower. Defeat him and take the ring; wear the ring. Go to the Saromunder's hut and cast Shazaroth on him (you need the Book of Zarimir for the spell to work). Take the Runestone and leave the hut. From Saromunder's hut go W, W, W, W, W, S, S, W, W, N, N, W, W, N, N, E, N, N, W, W, W, N, N, E, E, E, N, E, N, N, W, W, S, W, W, W.

You should now be able to see Kordomir's Fortress. Make sure you are Greymarel and you are wearing the ring, and you have the Runestone. Go into the fortress and Kordomir will be destroyed.

A Redman, Bristol

SAS ASSAULT

Dear Derek,
I have recently read the letters (*Mark Whatling, Aled ab Iorwerth*) regarding the FOURTH PROTOCOL. I have compiled the solution to part three: The SAS Assault. I hope you find it useful.
1) The warehouse to go to is TIPTREE
2) Select Browning automatic pistols and grenades for all of the men except Valentine. For him choose the Wingmaster door-opening pumpgun.
3) Start all six men in room E
4) (BILBOW) BOMB NORTH (PULL PIN, THROW GRENADE, N)
5) Move all men north
6) (VALENTINE) SHOOT DOOR
7) (GRANT) BOMB SOUTH. SOUTH. BOMB WEST
8) (BILBOW) SOUTH. WEST. BOMB SOUTH
9) (CROMWELL) SOUTH. WEST. BOMB WEST. WEST. BOMB SOUTH
10) (STUART) SOUTH. WEST. WEST. BOMB NORTH. NORTH. BOMB EAST
11) (HUMBAR) SOUTH. WEST. WEST. NORTH. EAST. BOMB NORTH. NORTH. BOMB WEST
12) (VALENTINE) NORTH. EXAMINE CABINET. USE KEY. 12051987
13) PRESS KEY RYG
14) CUT WIRE. R
AND WAIT FOR THE CLOCK TO STOP.

Colin Davidson, Wimbledon.

OUT OF THE SHADOWS

Dear Derek,
With the release of the adventure compilation FOURMOST ADVENTURES, it is very likely that Mizar's OUT OF THE SHADOWS will finally receive the acclaim it deserves from other magazines and a wider group of players. So, to help all the new players build up a powerful character quickly I have sent in my method and tips in addition to those sent in by *GOB Havenhand* in Issue 16 (May 85).

The best dungeon set up I have found so far is JOHN and it is around this dungeon I will develop the tips. For the beginner I suggest that the default character is used to get the feel of the game. After a while you may feel that you are ready to work on your own character. If you choose my method, then at the start go west off the screen and open the box you find there. Take the tinderbox out and head back east onto the starting screen. From here go north two screens and west one, and you should be on the screen with the shop. Buy a torch and head back to home.

On the home screen there is a stairway leading down to the first level. Go down this stairway after lighting the torch. The room is occupied by imps who don't attack unless you do. In this room there is a chest containing 16 silver coins. The chest may need to be attacked a few times before it opens.

After getting the coins, return to home, put out the light (not at night), stand on the healing cross and quit the game. You will then be faced with a menu from which you should select 3 (new dungeon). Next there will be a menu asking about quests which you should ignore (just type one of the numbers) and finally a screen asking you the title of the dungeon (JOHN). When you go back to the game you will have the same items in your possession. Go to the stairway and into the room below. Get the money from the chest and go back north. From there on it is a case of following this routine until you can afford a mace, a shield, a helmet and some more torches. When you have these objects then from the room with the coins in, go south to a room containing about six skeletons. Unlike the imps, you must kill these, so first clear the room full of imps and go south.

When in combat with the skeletons kill as many as possible, but if the life bar goes white then go back home to heal. When this room is totally clear of nasties open the box which is in the SW corner of the screen. This one has a helmet in it; then go north to the shop and sell it. If you keep doing this then the profits should rise quite quickly. When you have got a bit more armour then leave the room with the skeletons and go east to a room with zombies in it. The box is at the top of the screen and has a club in it. From this screen go north to another room with zombies, kill them and there is a chest with 15 silver coins in it. Also in this room there is a stairway. Go up this and west one screen to get home, or north twice to reach the shop. Sell the clubs and helmets for more cash and before too long you should have lots of money.

Get a sword for quicker kills, a lantern for more light for longer periods, 3 oils (for now), some food (should need some soon) and a full suit of armour. The armour holds you invulnerable to attack but can disappear without trace.

Another problem with the armour is that it is very heavy and it puts you out of breath quickly. When you fancy having a go at a quest, buy some markers and plot paths directly north with markers every few steps of the way home until you reach the house again. Now do the same going west. This prevents you getting lost when you come out of the dungeons after finding the quest. To build up your experience quickly go down as many stairs as possible to find dragons and balrogs. To a character with little experience these are worth a fortune in experience points.

John Maynard, Warwick

TIMETRAX

TIMETRAX

Just after the Holocaust you wouldn't think anything else could go wrong now would you? There you were sitting peacefully in your cellar, trying to have the nervous breakdown you've earned and the next thing you know you're setting out through the Portals to stop the Evil One rending asunder the fabric of Creation. Some days nothing goes right...

An amazing, all-action, animated adventure across the ages of Man to save civilisation. You'll be able to start playing it in minutes but you mightn't finish it for years!

WARNING: This game could damage your social life. TIMETRAX is an addictive habit.

COMMODORE 64, SPECTRUM or AMSTRAD: £9.95.

In case of difficulty this game is available from Argus Press Software.

Argus Press Software Group
Liberty House, 222 Regent Street,
London W1R 7DB.
Telephone: 01-439 0666.

MIND GAMES

LAST CHANCE TO WIN A 128!

Crash Competition

Six CRASH Sweatshirts and Hats up for grabs too!

Tableau Un

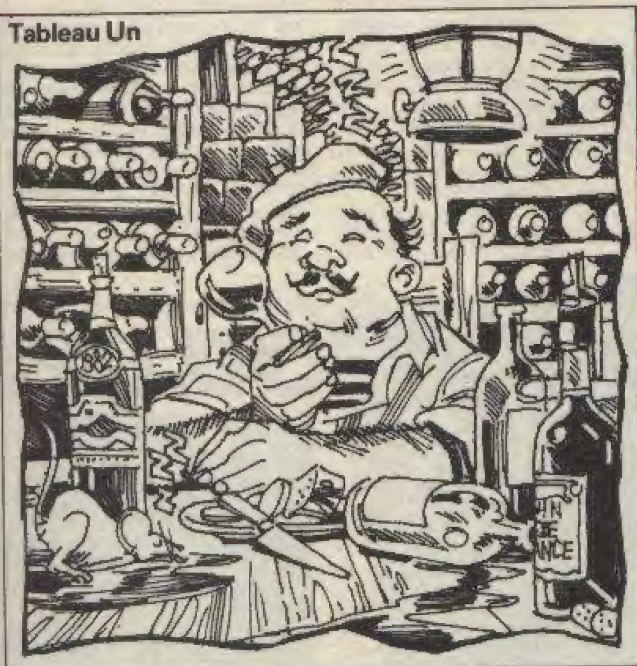


Tableau Deux

Well, thank heavens for that. Jacques the loonie French Competition Minion has finally gone home, leaving little more than a reek of garlic in the broom cupboard and memories of several happy hours chatting about the venue for my holiday this year.

This particular Minion is going to have great fun annoying Monsieur Le Minion in a couple of month's time when he gets to go to France on his holidaypoos. I've already booked in to Jacques' wine cellar in the offices of a French computer magazine and I can't wait to see how competitions are done across the channel!

Since he went home, Jacques has sent me a very polite Thank You letter, enclosing a sketch of the wine cellar to which he retires when people start chasing him to do some work.

Looks great to me. No nasty broomsticks to dig into your back as you snooze, no bleach and cleaning materials to pong the place out . . . and all those lovely bottles of vino within comfortable reach, just in case you get thirsty while on the skive.

Tres bon, mon ami. J'arriverai . . . well, I'll be along soon, anyway. Meanwhile, oh putative (LMLWD) 128 Winners, (I wonder if there's going to be a LMLFWD out in time for my hols. It'd be dead good to be able to impress the Frenchipoo magazine people with my knowledge of super long words in their own language. Must ask Lloyd), meanwhile, on with the competition.

Uncle Oli has doctored a copy of Jacques' sketch of his wine cellar, so there are now two versions reproduced on this page, cunning marked UN and DEUX (take every chance to practice my French, you see, every chance). Picture numero deux is the one with a few changes and there's an entry form right by it too.

To enter, you'll have to ring all the differences you spot on picture deux, complete the entry form with your name, address, post code and shirt size and whizz it off to *THIRD 128 COMP, CRASH TOWERS, C/o The Broomcupboard, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB* to arrive by 26th June. This is really your very last chance to win a shiny new 128K Spectrum courtesy of Newsfield, publishers of CRASH. Don't forget to clip out the entry coupon from 61 of the May issue of CRASH and staple, sellotape or glue it firmly to your entry form on the little square provided. This strictly a coupon-clippers only competition, I'm afraid, so any entries without an original coupon from last issue will be disallowed, even if they are correct in every other respect.

Bonne Chance, autrefois!

NAME _____

ADDRESS _____

_____

_____

_____ POST CODE

SHIRT SIZE _____

"COUPON HERE"

THE GAMES GATHERINGS

There have always been collector's editions of books, records, tapes, and nowadays even of videos. The computer game industry has featured compilations from the very earliest days, but there have been a few recent developments in the compilation market, as GRAEME KIDD notes . . .

One way of picking up cheap copies of original games is to pop along to computer shows, such as the ZX Microfairs, which are invariably attended by companies offering all sorts of old and not-so-old games at discount prices. *The Great Space Race*, for instance, is no joke at £15-odd, but for a couple of pounds is makes a reasonable bargain, if only for the large box which is very handy for keeping bits of string, conkers and other oddments in.

Budget labels are on the increase — and another source of cheap games is becoming more widely available. Sometimes a firm like Mastertronic will give an 'old' game a new lease of life by re-releasing it at a knock-down price, but more often than not one of the cheapest ways to buy games or fill that gap in your software collection is to snap up a compilation tape. Compilations offer value for money, too — the price per game for titles on compilations ranges from around 33p a game in the case of **Argus Press Software**'s *30 Games* to the more usual £2.50 per-game level.

CHARITABLE INTENT

Compilations of games put together with charitable intent, with software houses donating games and companies involved in duplicating, printing, distribution and sales giving their services or working at cost, have already raised considerable sums for worthy causes. *Soft-aid*, put together specially for the Ethiopian Famine appeal raised an awful lot of money for famine victims last year, becoming the biggest chart success in the history of computer gaming. This year, The Industry (with a capital I) has collected together ten games under the *Off The Hook* title, which sells for £6.99 with all profits going to the Prince's Trust to alleviate the suffering caused by the illegal use of drugs. **War on Want**, the charity set up to combat world poverty, has also just released a

Many programmers began their careers with compilations of their own games, but nowadays collections of games tend to be put together by buying the rights to existing software. The tape magazines, which seem to have faded away, were perhaps the last widely available medium for 'minor' games.

Halesowen based programmer Stewart Green, has leapt into the world of software publishing with a compilation of six of his own games sold for £4.50 as the *Astrocade Collection*.

fourteen game compilation tape available by mail order (see the advertisement that should appear in this issue). Spending a little money having fun and contributing to charity at the same time is no bad thing . . .

On the purely commercial front, some companies have decided to offer collections of their own games for sale. **Hewsons**, for instance put together a value pack last Christmas which was a compilation in all but name — a shrink wrapped set of original games in original packing. Such 'collected works' are really limited offers rather than compilations proper.

Mikro-Gen is planning to collect the *Wally* games together one day soon, perhaps putting them out back-to-back or including them with budget titles . . . the ranks of *Wally* fans will no doubt be swelling soon.

IS THE FORCE WITH YOU?

Melbourne House supplies *Mugsy* as a freebie with their new release, *Mugsy's Revenge*, thus enhancing the monetary value of their product quite a bit. The same company has also entered into a co-operative venture with **Firebird, Activision**, and **Beyond**. This quartet of companies call themselves **The Force** for the purpose of compiling game albums, and so far **The Force** has issued *Hotshots*, which contains one hit game from each team member. Plans are apparently afoot to take the Christmas market by storm, with a collection of games the like of which no Spectrum Game Player has seen before. *Mindshadow*, *Fighting Warrior*, *Gyron* and *Shadowfire* plus *Tuner* for £9.99 on the first *Hotshots* tapes must represent good value for anyone who has only got a couple of those games already.

Th biggest bumper bag of goodies is currently on offer from **Argus** *in the form of 30 Games*, which as its title suggests, leads the field in terms of volume. Argus has access to a massive back catalogue of titles — software house buy-outs and licensing deals as well as in-house labels, including tape magazines, puts the **Argus Press Software Group** in a very good position to go for *The Biggest Compilation* record. As is so often happens in life, however, quantity is at the expense of quality in the case of *30 Games*. A few moments spent on mental arithmetic produces an average price of 33p a game — so perhaps one shouldn't really expect too much of the original titles. There are a few neat games hidden in the jungle, and half the fun of buying *30 Games* for £9.95 probably lies in loading them all, one after another, and working out which ones to load again!

CHRISSY COMPILATION

Although *They Sold A Million* is a rather ambitious claim to make in the title of a compilation — unless is contains an awful lot of very good games, *They Sold A Metaphorical Million* doesn't have quite the same ring, as Ocean/US Gold and **The Hit Squad** no doubt realised when they launched their first *TSAM* collection in time for Christmas at £9.95. *Beach Head I*, *Jet Set Willy*, *Daley Thompson's Decathlon* and *Sabrewulf* got the title off the ground, and more recently *TSAM II* appeared, giving a new lease of life to *Bruce Lee*, *Match point*, *Knight Lore*, and the classic *Match Day*.

Virgin is yet another company well into compilations — *WOW! Games* One and Two have appeared so far, at the slightly lower price point of £8.95, with the first collection featuring half a dozen games (average unit price £1.49) and *WOW! II* slimmed down a little to the five games level (£1.79 a game to save you working it out). Respectable games all, although *WOW II* probably presents slightly better value in that the quality of the games is a little better as compared with its predecessor. (That old argument about the Two Q's crops up again!)

Ian Stewart, the Main Man at **Gremlin Graphics** hit upon the wizard wheeze of going for games to put on a compilation on the basis of reviews — CRASH Reviews, naturally for Spectrum software — and the first CRASH Smash collection has already been let out of the Gremlin stable to zoom up the charts. Yet another £9.95 collection, this one features *Dun Darach*, *Alien 8*, *Night Gunner* and *Spy Hunter*. A neat selection of top rate games that is spread across a range of gameplaying interests. Mr S from Gremlin has plans for a 'top notch' compilation in time for Christmas — this time featuring at least one Gremlin Graphics game.

THE MARKETING APPROACH

Marketing companies have seen the possibilities of entering the software world without the pain and aggravation of actually writing games. **Beau Jolly** has assembled several compilations for the Spectrum so far: a £5.99 *Value Pack* featuring old **Imagine** (of *Wacky Waiters* fame) product; the £9.95 *Mega Hits* collection; *6 Computer Games* for £6.95 and *10 Computer Games* for £9.95. With the possible exception of the value pack, some quite respectable titles can be had from **Beau-Jolly** at a very fair price, although their £19.95 mega-compilation didn't do a storm by all accounts. More compilations are on the way from the Beau-Jolly team — who learnt their trade in the record industry. Remember K-Tel?

So far there have been few "theme" compilations, concentrating on the works of one programmer or on one kind of game. **Global's** *Fourmost Adventures* reviewed by Derek a little while ago sprang quickly to mind, but resident strategist Sean Masterson was at a loss to name a Strategy compilation . . . perhaps there's still a niche or two left unexploited in the compilation market after all!

The last word in compilations must surely go to **Firebird** who had a bit of fun with a small collection of slightly dire games that had been submitted for consideration to the **Silver Range**. *Don't Buy This*, paradoxically, was sold. But with a strong disclaimer and a very tongue-in-cheek inlay blurb . . .

SOWN WORK . . .

Taken separately, the individual titles range don't have a great deal to offer, but as a collection the whole is greater than the sum of the parts.

Simeon is a competent implementation of the classic *Follow the sequence of lights and notes* game which has nothing much to offer in the way of originality but should prove mildly entertaining nevertheless.

Bomber sets you in the air against flying nasties that scroll across the background and which have to be eliminated. Collisions with the background or the enemy proves fatal to you and your craft — and while a selection of backgrounds can be called onto the screen, the gameplay remains basic and simple.

Luna Rover is perhaps the most addictive of the six games. As the title suggests, the player controls a vehicle scampering from left to right across a rather awkward landscape. To survive, careful timing of jumps is needed as well as some nifty work with the rover's accelerator and brake pedals.

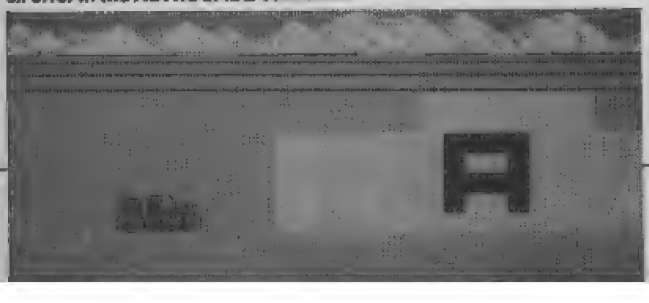
Alien is a tried and tested version of a 'shoot the nasties as they move down at you from the top of the screen' game, which tests reactions and hand-eye coordination. As a stand alone budget title, this game would be a bit of a rip off, given the standards achieved on budget labels nowadays, but at 75p it's value for money rating, at least, increases to a respectable level.

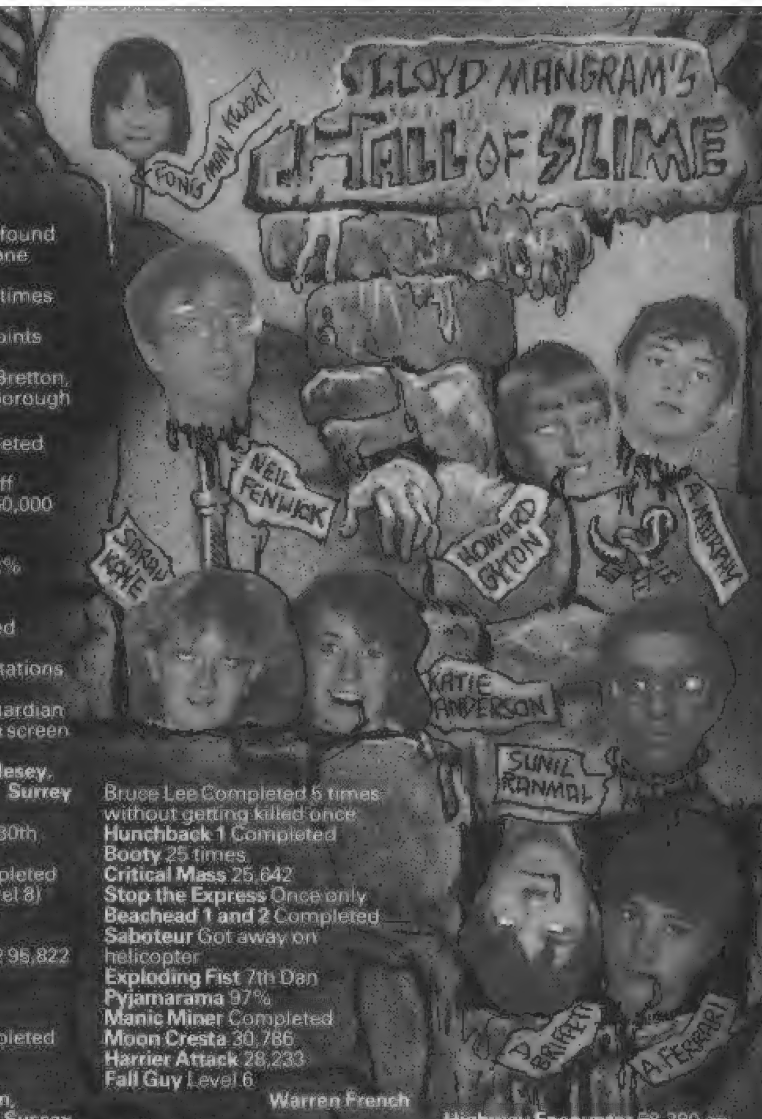
In *Zombie* the aim of the game is to scamper round the on-screen playing area gathering up goodies and avoiding the baddies. Leave one edge of the screen and your little man sproings back into play from the other side — which can lead to some hairy moments. Quite a compulsive little reaction game, all in.

The sixth game in the collection is a single key entry adventure in which the player has to search a network of caverns looking for treasure. No tedious typing in of text in this fast moving adventure game!

Overall, the *Astrocade* collection should keep any games player quiet for at least an afternoon, although the games are ultimately very simple and unlikely to have a massive impact on the addictivity front.

Zooming along in your LUNAR ROVER, one of the six games on offer in the ASTROCADE collection





Tapper Space Bar
Trashman 12,999
Airwolf Completed
Knight Lore Completed
Jet Set Willy Completed
Jet Set Willy II 37 rooms found
Chequered Flag Silverstone 57.04 seconds
Bruce Lee Completed 10 times
Ghostbusters Simple
Cosmic Wartoad Toad points 9,000
Martin Harwood, South Bretton, Peterborough

Pyjamarama 91% Completed
Exploding Fist 6th Dan
Shadowfire Captured Zoff
Beachead Completed. 250,000
Hobbit 87%
Airwolf 1 Scientist
Starquake Completed 92%
Tranz Am 6 cups
Orbiter 1,000,253
Cavelon Completed (killed wizard)
Lunar Jetman 8 Rocket stations knocked out
Brainstorm Killed one guardian
Zoom Been through each screen three times
William Phipps, East Molesey, Surrey

Yie Ar Kung Fu 215,500 (30th Level)
Neverending Story Completed
Commando 122,550 (Level 8)
Gunfright Milkie Bar Kid
Sir Fred 48%
Supertest D1 119,680, D2 95,822
Marsport 92%
M.O.V.I.E. 58%
Underwurlde 38%
Monty On The Run Completed
PSST 2,595,550
Elite Deadly
Duncan Briffett, Horsham, Sussex

The Hobbit Completed
Saboteur Completed
Tomahawk Shot down 7 helicopters and all targets
Hypersports Swimming 25.7; Shooting 9200; Vault 12.10; Archery 7,000; Weights 210 Kg; Triple Jump 17.20
DT's Supertest Beat all people in tug of war
Frank Bruno's Boxing Knocked them all out
Sabre Wulf Completed 100%
Exploding Fist 10th Dan
Mikie Completed three times in a row
Commando 300,500 Area 10
Elliot Esterson, Snaresbrook, London

Frank Bruno's Boxing Completed
Spy Hunter 1,440,375
Hypersports Swimming 25.20; Skeet Shooting 4200; Long Horse 9.83; Archery 4200; Triple Jump 16.30; Weight Lifting 210 Kg
Football Manager Champions and cup 6 times in a row
Exploding Fist 6th Dan
Commando 117,400
Matchday Final won 14-0
Dambusters Dam destroyed
Highway Encounter Zone 1
Saboteur Completed
Harrier Attack Completed 35,600
Grand National 1st
Kung Fu Black Belt Level 7
Pole Position Completed 1st
Michael Ramsay, Angus, Scotland

Bruce Lee Completed 5 times without getting killed once
Hunchback 1 Completed
Booty 25 times
Critical Mass 25,642
Stop the Express Once only
Beachead 1 and 2 Completed
Saboteur Got away on helicopter
Exploding Fist 7th Dan
Pyjamarama 97%
Manic Miner Completed
Moon Cresta 30,786
Harrier Attack 28,233
Fall Guy Level 6
Warren French

Yabba Dabba Doo Completed with 7 lives
Atic Atac Completed
Mikie 62,750
Kokotoni Wilf Completed
Rocky Horror Show Completed
Herbert's Dummy Run 91 Jelly Babies
Robin O' The Wood 2 weapons
Sarah Kaye and Katie Anderson, Loughborough

Commando 272,300 Level 13
Roller Coaster 9,500
Yie Ar Kung Fu 397,300 Level 53
Frank Bruno's Boxing Frenchie
Glass 63,200
Bruce Lee 1,500,000 then got bored
Hobbit Completed
Starquake 5 pieces
Highway Encounter Completed 27,850
Gunfright The Sundance Kid
Way of the Exploding Fist Retired because there was no bull at 100,000
Spy Hunter 585,355
Aaron Murphy, Huddersfield, West Yorkshire

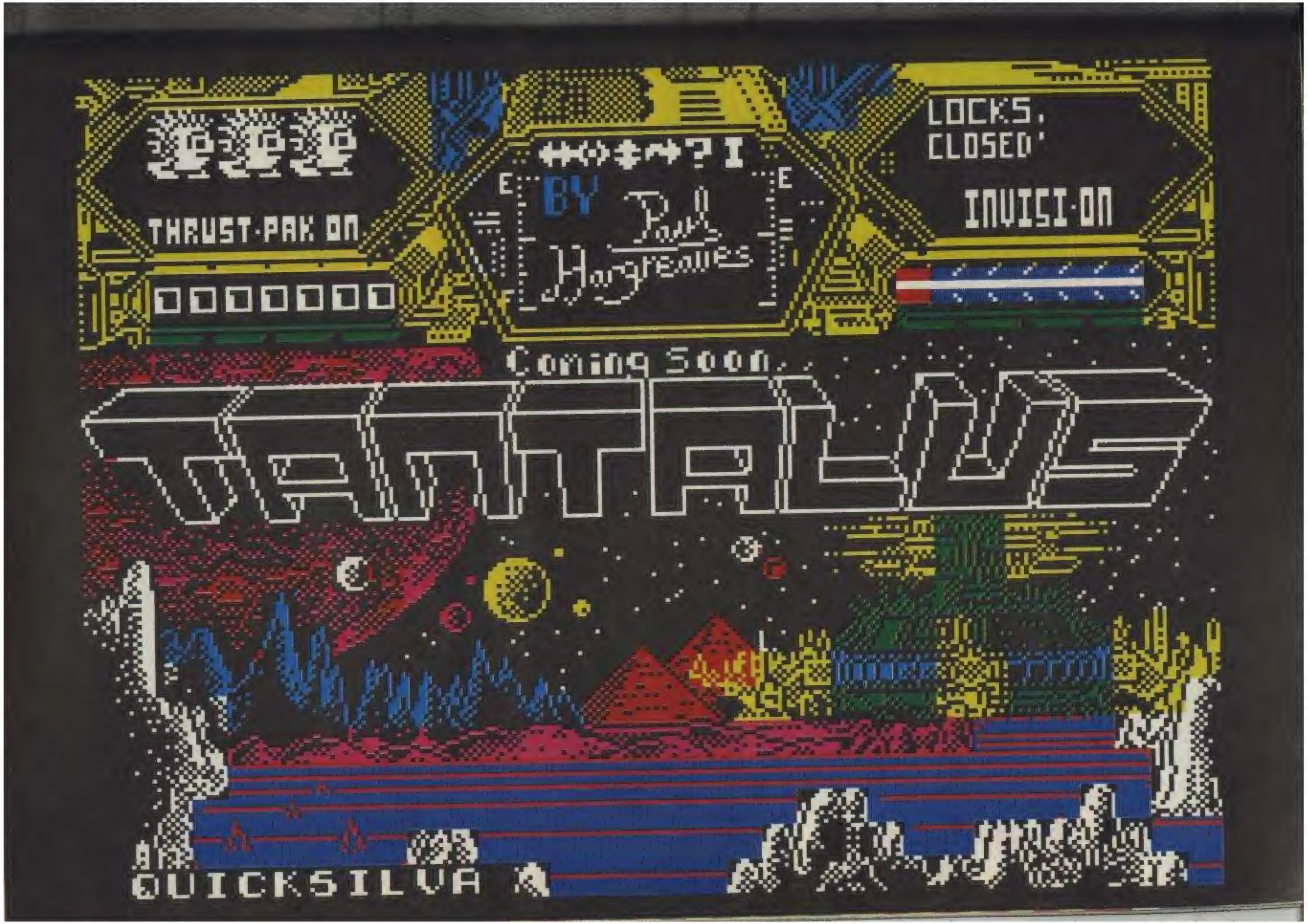
Bomb Jack 402,800
Everyone's A Wally Completed £2,580
Herbert's Dummy Run Completed
Exploding Fist 10th Dan
Commando Area 10 over 1 million scored
Bruce Lee Completed 18 times
Saboteur Completed
Neil Fenwick, Feltham, Middlesex

Highway Encounter 58,380 on 3rd Highway, Zone 1
Sabre Wulf Completed with 211,480, 100%
Atic Atac Completed with 289,695, 99%
Starquake Completed with 364,400, 86%
CDS Pool 2,370, Frame 7
Tapper 229,775, reached space bar on 2nd round
Impossible Mission Completed with 15,097 points in time 4.46.43
Sunil Ranmal, Leicester

Exploding Fist 10th Dan 12 times
Monty Mole Completed
Pyjamarama Completed 93%
Everyone's A Wally 90% Completed
Herbert's Dummy Run 99% Completed
3 Weeks in Paradise 100% Completed
Elite Elite 90,994,543 credits
Travels with Trashman 13,422 been to all locations
Tau-Ceti Completed
Spellbound Completed 89%
Tranz Am 10 cups
Jetpac 12,990,800
Cookie Made cake 6 times
Ant Attack 9 Women
Zoom 149,000
Knight Lore Completed 95%
Skyfox Completed all levels
Arc Of Yesod 73%
Howard Gyton, Ely, Cambridgeshire

Commando 1,295,210 (Area 16) when we got to a million, the scores went back to nought
Bomb Jack 140,960 (we played on all the platforms, all that happened was that they change the place)
Starquake Completed 59%
Dynamite Dan Completed
On The Run Completed
Gyroscope Bonus 440. Overall 1,320
Hypersports Swimming 25.44; Shooting 9100; Horse 9.99; Archery 3,400; Triple Jump 15.46; Weight Lifting 180 Kg; Overall 139,539 (All on Keyboard)
Rocky Horror Show Needed 2 pieces
Airwolf 1 Scientist
Deathchase 35,082
Monty On The Run 4500 Needed 'other object'
Wizard's Lair 2 pieces of Golden Lion
Fong Man Kwok and Cheng Po Yuk, Levenshulme, Manchester

Grand National 1st
Rocco 3rd Boxer
Hypersports Swimming 25.03; Skeet Shooting 8,900; Long Horse 9.99; Archery 3,710; Triple Jump 18.46; Weight Lifting — light weight
Bruce Lee Completed 6 times
Rocky Horror Show Completed
Automania Completed
Pyjamarama Completed
Everyone's A Wally Completed
Herbert's Dummy Run Completed
Three Weeks in Paradise Completed
Manic Miner Completed all screens
Jet Set Willy Completed
Dynamite Dan Completed
World Cup Football Final won 2-0
Buck Rogers Level 6
Tapper 3rd Bar
Ghostbusters 2 men in Zuul
Spy Hunter 120,316
Kokotoni Wilf 2nd sheet complete
Engineer Humpty 7th Level
Derby Day £100,000
Andrew Perron, Bracknell, Berks


LOCKS.
CLOSED'
INVISI·ON
THRUST·PAK ON
BY
Paul
Hargreaves
Coming Soon
QUICKSILVA

TOP 30 FOR JUNE

1 (1) COMMANDO **Elite**
2 (2) ELITE **Firebird**
3 (5) EXPLODING FIST **Melbourne House**
4 (3) BACK TO SKOOL **Microsphere**
5 (4) STARQUAKE **Bubble Bus**
6 (14) FAIRLIGHT **The Edge**
7 (6) SABOTEUR **Durell**
8 (8) HYPERSPORTS **Imagine**
9 (16) GYROSCOPE **Melbourne House**
10 (13) MATCH DAY **Ocean**

11 (9) ROBIN O' THE WOOD **Odin**
12 (24) SPY V's SPY **Beyond**
13 (—) MARSPORT **Gargoyle Games**
14 (20) SWEEVO'S WORLD **Gargoyle Games**
15 (7) GUNFRIGHT **Ultimate**
16 (15) YIE AR KUNG FU **Imagine**
17 (28) HIGHWAY ENCOUNTER **Vortex**
18 (—) SPY HUNTER **US Gold**
19 (10) WINTER GAMES **Epyx/US Gold**
20 (17) RAMBO **Ocean**

21 (11) SPELLBOUND **Mastertronic**
22 (22) ROLLER COASTER **Elite**
23 (18) TOMAHAWK **Digital Integration**
24 (—) SHADOWFIRE **Beyond**
25 (25) MONTY ON THE RUN **Gremlin Graphics**
26 (21) MIKIE **Imagine**
27 (12) M.O.V.I.E. **Imagine**
28 (—) ENIGMA FORCE **Beyond**
29 (—) LORD OF THE RINGS **Melbourne House**
30 (—) LORDS OF MIDNIGHT **Beyond**

It seems that **Elite's** COMMANDO has managed to dig firmly into the top slot — it holds off **Firebird's** ELITE for another month. No brand new entries this month, but Commander Marsh leads the string of re-entries, taking **Gargoyle's** MARSPORT into fourteenth position, just pipping his brother-in-arms, SWEEVO who moves up five to the fifteenth hole. SPYHUNTER from **US Gold** follows close on their heels in eighteenth position. FAIRLIGHT from **The Edge** jumps into the top ten from last month's fourteenth position and it looks as if it could be a wrap for **Imagine's** M.O.V.I.E.

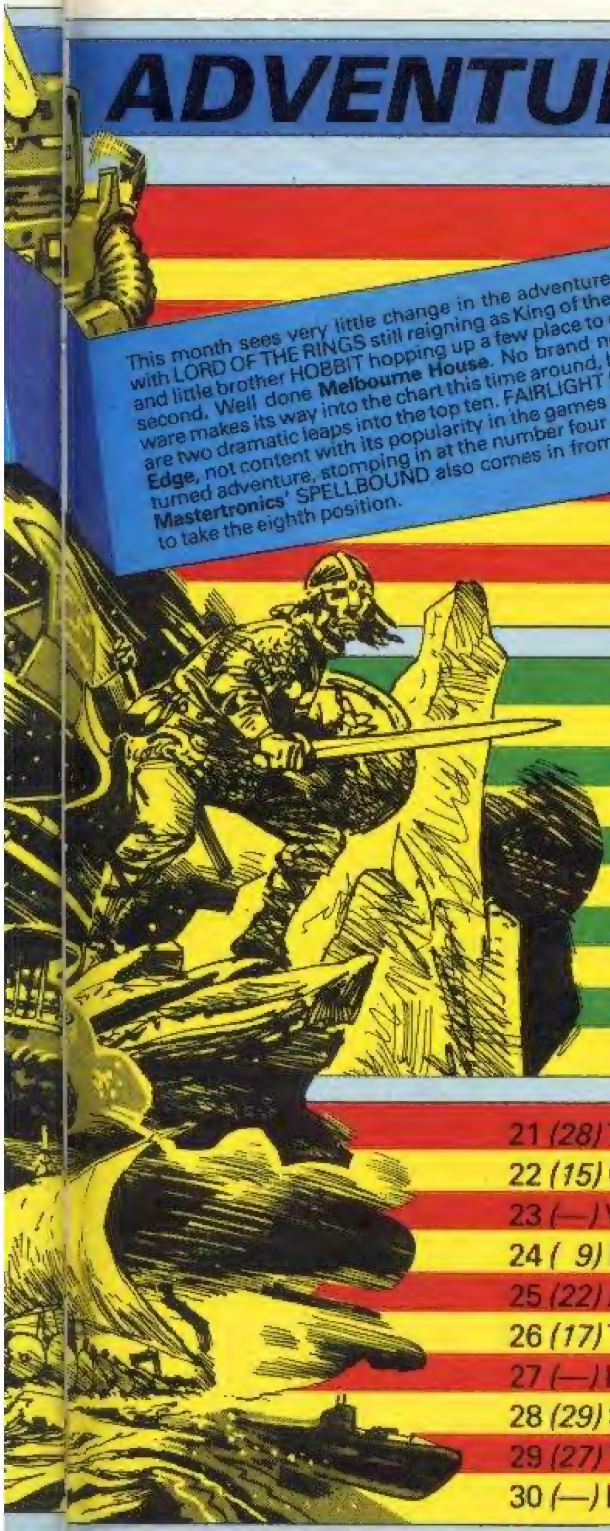
Auntie Aggie has promised to seal a jiffy bag with a special kiss for **Gary Swinburn** of Liverpool, who has won the forty pounds of software in this month's Hotline draw. CRASH Hats and T Shirts go to **E Deane** of Ross on Wye; **S Burgess** of Ayrshire; **Andrew Matthews** who shares London with the ever expanding Mr Liddon, and finally **Jason Hartley** of Middlesex. (Seems to win a lot of things, does Jason, or is this Minion just imagining things?)

The CRASH HOTLINE AND ADVENTURE CHART is Britain's most important popularity chart — for Spectrum Software, at least. The chart depends entirely on your support and we need your votes in order to produce the analysis of who's playing what.

Nowadays, there's only ONE WAY to submit your votes — and that's by post. Towards the back of the magazine, lurking very close to the competition results bit, you'll find a couple of coupons that you can use to send us your votes. If you're really unkeen on cutting up your magazine, you could always use a photocopy, or copy out the details on the forms onto a plain piece of paper.

Whatever you do, get those voting forms in. Every month we draw out a total of ten winning forms after the charts

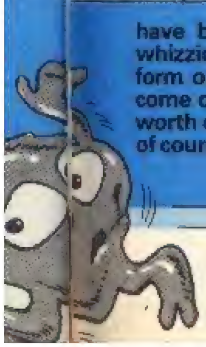
ADVENTURE TOP 30 CHART



This month sees very little change in the adventure charts with LORD OF THE RINGS still reigning as King of the Castle, and little brother HOBBIT hopping up a few place to come in second. Well done **Melbourne House**. No brand new software makes its way into the chart this time around, but there are two dramatic leaps into the top ten. FAIRLIGHT from **The Edge**, not content with its popularity in the games chart has turned adventure, stomping in at the number four slot while **Mastertronics'** SPELLBOUND also comes in from nowhere to take the eighth position.

1	*(1)*	LORD OF THE RINGS	**Melbourne House**
2	*(6)*	THE HOBBIT	**Melbourne House**
3	*(12)*	SWORDS AND SORCERY	**PSS**
4	*(—)*	FAIRLIGHT	**The Edge**
5	*(2)*	MARSPORT	**Gargoyle Games**
6	*(5)*	FOURTH PROTOCOL	**Century/Hutchinson**
7	*(23)*	ROBIN O' THE WOOD	**Odin**
8	*(—)*	SPELLBOUND	**Mastertronic**
9	*(3)*	DUN DARACH	**Gargoyle Games**
10	*(4)*	RED MOON	**Level 9**
11	*(14)*	FRANKIE	**Ocean**
12	*(20)*	ADRIAN MOLE	**Level 9/Mozaic**
13	*(8)*	SHADOWFIRE	**Beyond**
14	*(19)*	WORM IN PARADISE	**Level 9**
15	*(7)*	DOOMDARK'S REVENGE	**Beyond**
16	*(10)*	LORDS OF MIDNIGHT	**Beyond**
17	*(11)*	BORED OF THE RINGS	**Silversoft**
18	*(18)*	ROBIN OF SHERWOOD	**Adventure International**
19	*(16)*	ENIGMA FORCE	**Beyond**
20	*(13)*	SHERLOCK	**Melbourne House**
21	*(28)*	TERRORMOLINOS	**Melbourne House**
22	*(15)*	GREMLINS	**Adventure International**
23	*(—)*	VALHALLA	**Legend**
24	*(9)*	LORDS OF TIME	**Level 9**
25	*(22)*	AVALON	**Hewson**
26	*(17)*	TIR NA NOG	**Gargoyle Games**
27	*(—)*	HULK	**Adventure International**
28	*(29)*	SPIDERMAN	**Adventure International**
29	*(27)*	THEIR FINEST HOUR	**Century**
30	*(—)*	HAMPSTEAD	**Melbourne House**

The usual forty pounds worth of software will soon be squeezing its way through the postbox of **Paul Young** who, unlike the singing star of the same name, lives in Suffolk.
four lucky runners up are: **Stephen Barrett** who goes to bed early 'cos the sun sets at 2 o'clock in Birmingham; **Martin Faulkner** who avoids the berks in Berkshire; **Paul Wakling**, a Sussex lad and finally, they say all hope must be rewarded, and **Trevor Hope** from Forest Gate in London



have been compiled, five for each chart, and prizes go whizzing off to the lucky senders of those forms. The first form out of the sack of Hotline votes, like the first one to come out of the Adventure voting box, wins its sender £40 worth of software of his or her choice, And a CRASH T Shirt, of course.

The next four voting slips for each chart, that's eight voters in all, win a T Shirt and Cap. Don't miss out on your chance to win all these goodies for the cost of a 17p stamp and the time it takes to put pen and your opinions to paper. CRASH HOTLINE and CRASH ADVENTURE TRAIL are what we call the giant boxes that your votes go into, and they can be reached via PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB.

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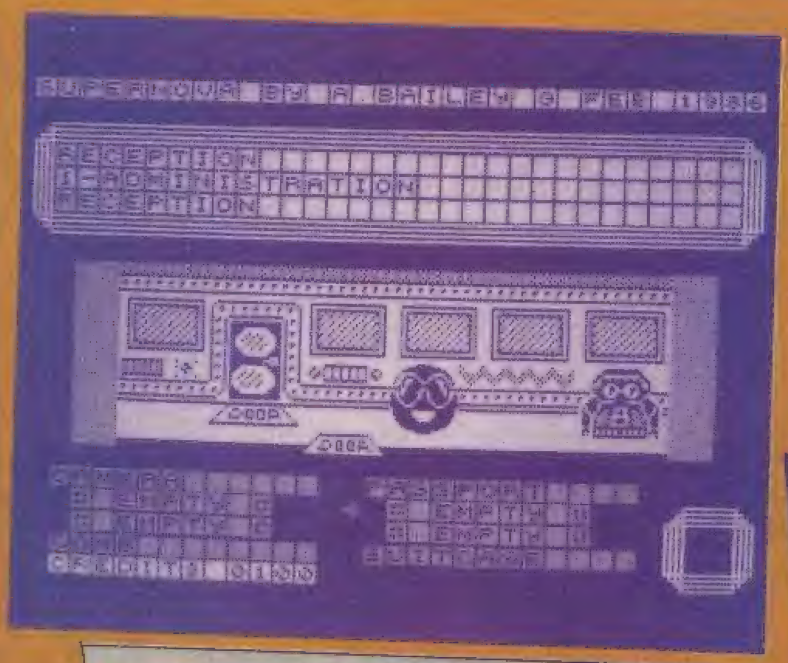
HOMEGROWN SOFTWARE

Following the review of Richard Welsh's program, FRANK THE FLEA, in the April issue, we have received quite a few 'home grown' programs for review. Maybe something is starting . .



Antony Bailey is ASTRAL SOFTWARE, and he's asked us to take a look at SUPERNOVA. In the game you take on the role (or should that be roll?) of a round ball creature — The Really Odd Bio-Organism Thingy. You've been on holiday, staying at the SUPERNOVA hotel and now can't pay the bill. It's time to raise some cash to give the hotel management so they'll let you go home . . . Full review next issue

SKY SEARCH accompanies JET-SET SPIDERY on one cassette from SPIDERSOFT — the outfit run by Thomas Albrighton down Birmingham way. Just sneaked in the office in time to be snapped by ace lensperson Cameron Pound, who reports they're interesting . . .

MONEY FOR NOTHING is just one of two games on offer from Paul Stockley, who hasn't got a name for his software house yet but has turned in a neat MONTY ON THE RUN type game, backed up by a version of the classic CENTIPEDE game.

Quite a few people shared our view that *Frank The Flea* was an interesting, value for money game — despite the fact that the review clearly stated that copies were only available direct from **Megasoft** on payment of £1.00 plus post and packing. Auntie Aggie fielded some twenty five orders in her department. Not bad going for a brand new software house!

Conversations with SIMON GOODWIN who lives in TECH TIPS and with DEREK BREWSTER our adventure reviewer set the old cogs whirring — both Simon and Derek quite often receive 'home grown' programs in their mailbags despatched from CRASH Towers, and every now and again some thing worthy of a closer look pops up.

Running a small software house when you're on your own isn't easy — as the interview with Stewart Green of Data Design Systems in the May issue revealed. There's so much to do: actually writing the program isn't the end of the process by any means — there's inlays to produce, duplication to arrange, sales to make and, hopefully, cash to bank!

DOING IT YOURSELF

The whole software industry first began with Do-It-All—Yourself outfits, often operating from the the Front Room where all the duplication and packaging went on and early ZX Microfairs were full of folks selling their own home-produced wares.

Some of these people have made their money, left the software marketplace and gone on to pastures new. Others have carried on, forming proper businesses, hiring staff and getting bigger and better. But, in a way, the market has turned full circle now, and it is dominated by large commercial concerns who produce expensive products backed with large advertising budgets and professional sales teams, dealing with the High Street shops and distributors.

It's not easy to break into selling your own software today — and with the advent of large companies who work to commercial margins there's almost certainly quite a few decent programs out there that only ever get sold to friends, relatives and people in the street.

GETTING TO MARKET

We thought it would be a nice idea to give wider exposure to some of the up and coming software authors who have yet to get a game published on a fully commercial basis, and who knows — one day there might even be scope for a budget price compilation of the best of the little proggies that never quite make it to market.

Derek Brewster gets a lot of *Quilled* programs in his post, and regularly receives letters from readers asking how to go about writing adventure games, and the design of a good adventure game for the Spectrum is a regular topic in SIGNPOST. By the time you read this, our beloved Doc Martened Editor will have zoomed up the motorway to persuade Derek to put together a feature on designing adventure games and programming them — either straight from the keyboard or via *The Quill, Graphic Adventure Creator* or another suitable utility. Would be adventure writers, look out for that one!

On the TECH TIPS front, Simon Goodwin reckons the range of 'serious' software in the shops is severely limited by commercial considerations. There's not much money to be made selling specialist material through the conventional and he feels that there must be lots of utility software out in the wide world that is worthy of a larger audience. He'll be explaining the type of 'minority interest' utility software that could be covered in TECH TIPS next issue, so if you have a whizzo routine that serves a useful purpose (other than Centigrade to Farenheit or hex to decimal converters and so on) Simon would be interested to hear from you.

LISTING FREE ZONE

Don't panic as you read this! We're certainly not going to break with tradition and start publishing listings — but if you have any ideas on how we should go about encouraging some less major programs out of the woodwork, don't hesitate to get in touch.

Next month in HOME GROWN SOFTWARE we'll take a closer look at the programs we've already received — but if you've written a game or a utility that no-one else wants to publish or you are selling yourself, why not drop a review copy in the post to **HOMEGROWN SOFTWARE, CRASH, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB** and we'll do our best to include it in a future look at HOMEGROWN SOFTWARE. Don't forget, you'll get into awful trouble if you try selling someone's elses program without their permission, so don't be tempted to send us anything that isn't all your own work!

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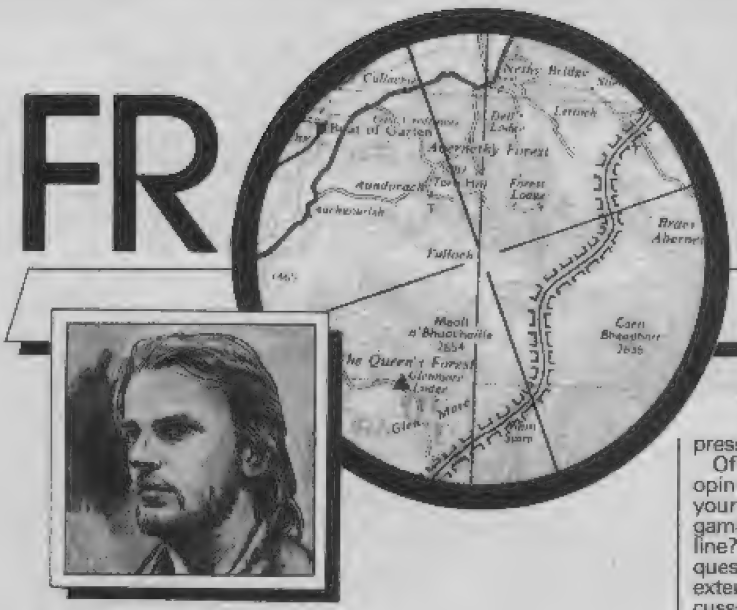
See Page 111

FRONTLINE

with Sean Masterson



THE RPG/PBM PERSPECTIVE

As you may have already seen, this month's Forum contains a letter from an irate Robert Gilmour on the matter of RPGs and home computers (particularly Spectrums). His claim is that RPGs, apart from not using such devices as joysticks, have a crucial social interaction aspect and far more complex rules, something that computer games inevitably lack. Mr Gilmour has missed the point of the argument by a long way.

Let's deal with the similarity between *Elite* and *Traveller* first. *Elite* uses a two dimensional interstellar mapping system just as *Traveller* does. Its concept of only having one major world for each system is identical to the philosophy expressed all the way through *Traveller*'s rules (until Book 6 Scouts, which contains a revised and more detailed system generation procedure). Both games make use of Tech Levels, industrial and agricultural trade classifications (and indeed, the items listings bare a marked resemblance). World data is similar for both systems. The way starships expend fuel is identical in both games as is the concept of having Free Traders as player characters — the list goes on. Of course there are some differences. But to say that they are 'nothing like' each other is quite simply not true.

To be fair, Mr Gilmour's main argument is that you cannot either fit an RPG onto a home computer system or have any of the best features of RPGs because computer gaming is primarily a solitary pursuit. But even so, it has taken *D&D* twelve years to develop into the game you see today. Just because you cannot fit all the rules for that game into your Spectrum, is it fair to dismiss *Swords and Sorcery* as a solo-RPG? The combat sequences for *S&S* are far more complex than those in *Tunnels and Trolls* and are more realistic.

The computer provides an excellent medium for solitaire role playing as *S&S* proves so well. While the computer RPGs are inherently weaker than their conventional alternatives in direct comparisons, they present a viable and satisfying experience for those who have neither the time, the money, or the players to explore anything else.

And now, onto another subject. As you will see from this month's Frontline Forum, the response to the suggestion that *Swords & Sorcery* could be treated as much as a strategy game as anything else has been favourable. As a result, I'll be looking at such games much more closely in the future. However, there's another matter that I would like you to consider. One of the fastest growing areas of computer strategy gaming is the PBM phenomenon. Although such games do not run on home computers (in fact, owning a computer isn't required at all), the games have intriguing plots, present incredible challenge to the players and have a social side to them as well.

I don't see why a column for computer strategy games should necessarily stop at those available for the Spectrum when there are games available to people regardless of which actual machine they own. Obviously, Spectrum games should constitute the main part of the column and there's no point in covering games for other machines. Nevertheless, PBM gaming is a fascinating area (as those who read John Minson's piece last month, will have seen) that doesn't receive much coverage in the computer press at present.

Of course, that's just my opinion. I would like to hear yours. Should coverage of these games become part of Frontline? And if the answer to that question is 'yes', to what kind of extent should they be discussed? Please let me hear your views on this matter as the sooner I have an idea of what you want, the faster I can go about supplying it.

And finally . . . This month should have seen the conclusion of my look back at some golden oldies. However, I've decided to hold over part two for a couple of reasons. First of all, lots of interesting letters have arrived on my desk and secondly, the all powerful Graeme Kidd won't give me any extra pages. So instead, we revisit *Desert Rats* and find that my prayers for a 128K strategy game have finally been answered — by CCS, no less. Read on . . .

DESERT RATS

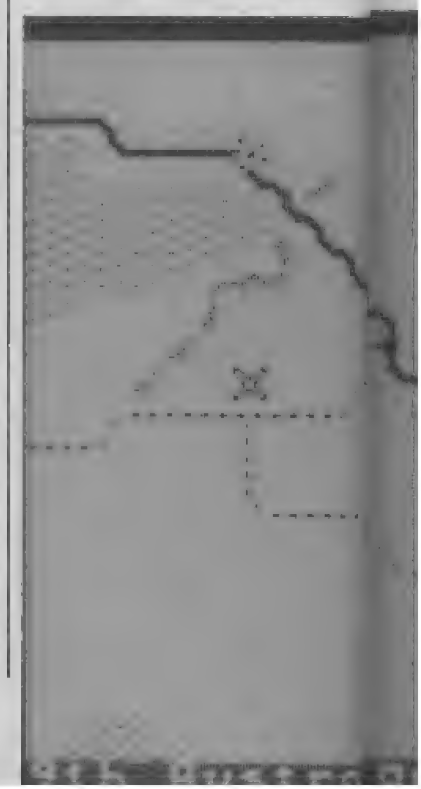
Producer: **CCS**
Retail Price: **£9.95**
Author: **RT Smith**

A couple of month's back, CCS's *Desert Rats* was sent in for review and although I rated it highly, I neglected to allocate it a Crash Smash status. The reasons for this were actually pointed to by Mr RT Smith, the author, himself. He had had to compromise somewhat to fit such a complex game into the available memory of the Spectrum. The result appeared to be a flawed work of genius. Then two months ago, I speculated on what the game might have been like if only it had been used for the 128K Spectrum and made a general plea for games that would take advantage of this extra memory.

Now it appears that my cries have been heeded. An expanded version of the game has just been released by CCS. With two extra scenarios and some improved features to neaten up the bundle, I was left with no doubt that this was the game I'd been waiting for all along.

The game now begins in the period prior to Rommel's arrival in North Africa. These were the days when the largely unsung achievements of Wavell and O'Conner led to the swift demise of the massive but ill-trained Italian Tenth Army. With hindsight, many historians have questioned the wisdom of Winston Churchill in sending Wavell on to other theatres of operation and breaking up the crack force that had developed under his command. His subordinate, O'Conner came more unstuck still, after an over-tired staff driver got lost one night and led him straight into the clutches of a German patrol, resulting in a stay in a POW camp for the rest of the war.

This era is covered over two scenarios, Operation Compass and Beda Fomm. In Operation Compass, the British player has



to capture Bardia and Tobruk from the Italians in a 45 turn limit covering the period from 9th December 1940 to 22nd January 1941. The objective of the Italians is to hold position in Egypt and keep the British out of Derna. Beda Fomm presents the British with the objective of capturing Benghazi and devastating the Italian Tenth Army while the Italians themselves must attempt to prevent this and control as much territory as possible. This scenario is the shorter of the two, lasting only 15 turns from 24th January to 7th February 1941.

The scenarios accurately give the player a taste of the Allies' better days in the North African Campaign, presenting the much more fluid nature of desert warfare that then prevailed. In *Desert Rats*, the pace of battle is set to reflect this. How much it contrasts with the far more stable days of Montgomery and his 'safety in numbers' philosophy! In play, this works very well and provides the less experienced or able player with a large scale but simple backdrop as an introduction to the game.

All of the scenarios from the first game are present but the main campaign game has been altered. *The Desert War* previously covered the period from Rommel's first attack in the Spring of 1941 to his withdrawal in December 1942. It was played over 624 turns. In this new version of the game, the scenario begins with the first British offensive in December 1940 and is now played over 736 turns.

There are several other modifications to the rules and presentation. The first that becomes noticable is a joystick option for those with Kempston, Protek or Sinclair interface owners. The obvious ease that this brings to the movement of units across the screen, greatly enhances playability. There is also a demonstration mode available from the main menu, which is entered by holding down the 0 key when selecting the number of players. The demo mode may be left by holding down the M key at the end of a turn.

Mass mobilisations are made somewhat more difficult to organise with the stacking rules now only allowing ten points per square as opposed to thirteen in the earlier version of the game. However, logistical problems should be less severe with the supply range now increased from seven to ten squares and from five to seven squares diagonally. Lybian and Blackshirt units are treated as brigades in the game (despite the fact that they are organised as divisions) because they are disproportionally weak and need to be supplied from an HQ unit.

For those who were looking for a more competent computer opponent, this game doesn't come up with the goods. However, it offers so much in terms of variety of play and improved presentation and structuring that it has to be seen as a milestone in Spectrum wargaming. If more software houses follow the lead so clearly set by CCS, those people who are considering buying the Spectrum 128 will find themselves spoiled for choice when it comes to challenging quality software.

PRESENTATION 91%
The best feature is the joystick option which speeds up play quite considerably. The demo mode is attractive as well

RULES 97%
The same high quality as the original — not changed significantly

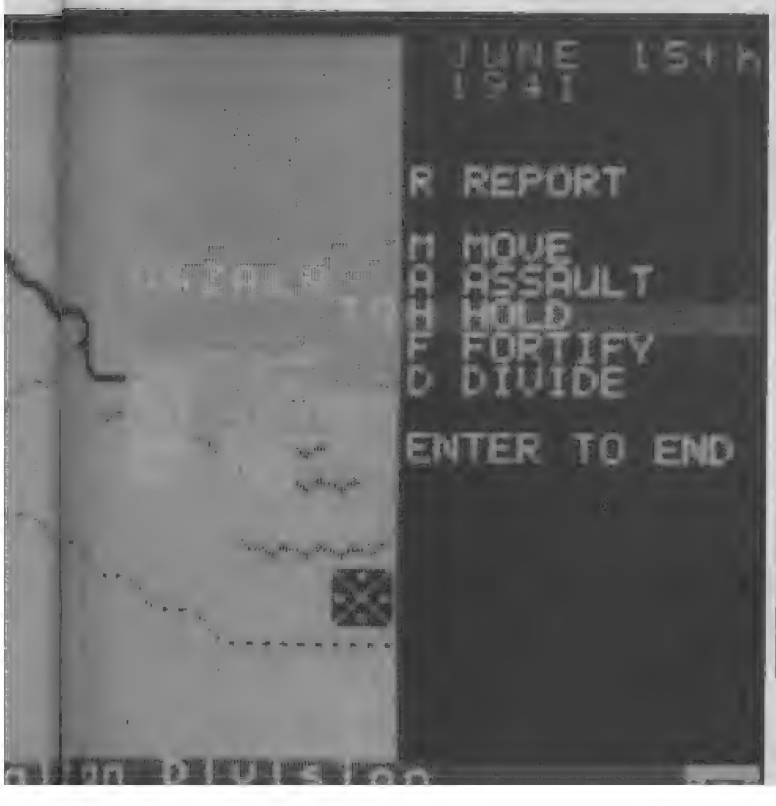
PLAYABILITY 92%
With the new scenarios and options, a beginner should find this game easily approachable

GRAPHICS 70%
Though these have not been modified and, in my opinion, are still poor compared to the rest of the game, I think this is a more accurate rating

AUTHENTICITY 91%
The campaign game still requires too much of the Allied player but modifications to order and supply rules are well devised

VALUE FOR MONEY 96%
Even if you do not have a Spectrum 128, the improvements to the game are most welcome and make the product worth every penny, especially considering the fact that the old price has been kept

OVERALL 95%
Whilst some of my original reservations still apply, this game has been so well executed and provides players with so much, to give it anything less than this would be a crime



Waiting for the big one. Australian units take up positions south of Gazala.

FORUM

There's very little space this month, so let's get straight to the business at hand, which starts off with . . .

PUTTING UP A FIGHT?

Dear Sean
One thing I have missed in your otherwise informative reviews is discussion of the quality of computer opponents. Surely this is what matters most in a good game. The interest of graphics, multiple scenarios etc. soon wears off.

Your reader C Francombe (April 86) is surely right to complain that usually computer opponents are just too easy to beat. Designers are not going to bother to do better if their 'opponent' is not analysed.

I have played CCS's *Arnhem* and *Desert Rats* and Lothlorien's *Waterloo* and *Austerlitz*. There is obviously an enormous difference in the computer opponents. In the CCS games the computer's play is either reasonable but predictable (*Arnhem*) or unpredictable but inept. (To be fair, these games look as if they were designed as two player games with a computer opponent added later). The Lothlorien games have an opponent that requires a lot of careful thought to outmanoeuvre (especially *Austerlitz* which is superior because both sides have greater variety of play). They are a challenge — ie they give a good game and who then gives a damn about a few historical omissions!

Obviously they are far from ideal, but at least the programmer set himself a difficult problem — co-ordinated land movement over a broad terrain — and solved it tolerably well. Let's have reviews that tell us how intelligent the opponent is!
AM Wright, Halifax

A good argument. As of next issue, I'll include an OPPONENT rating in all the reviews. That way readers will have more over which to disagree with me.
SM

SUPERPOWERED SPITFIRES?

Dear Sean,
Late last year I began to hear rumours of a fabled war-game called *Their Finest Hour*. Anticipation grew as computer magazines began to extol every aspect of this game. Perhaps this is what I'd been waiting for, a real-time war game, creating an atmospheric feeling, the fog of war, qualitative superiority — an historically accurate game and the effects of fatigue and morale also taking effect along with a ruthless opponent. The only draw-back, I felt, would be the fact it was icon-driven, remembering back to how I'd struggled with *Shadowfire* at the beginning.

Well, eventually I bought it and hurried home to have my finest hour. Unfortunately I was disappointed. I found the icon-driven format excellent and believe that future war-games should use these methods of command. However, there was virtually no atmosphere, I felt I was playing a computer, rather than fighting a war-game, as for being historically accurate I found it grossly inaccurate. According to this game Frei-Jagd groups of ME109s have free sway over all of southern England hitting targets like Debden and Bristol: both were beyond the ME109's range. During the same game, a formation of 21 Spitfires intercepted an unescorted formation of 96 HE111's. Great I thought, I may be able to shoot enough down to dissuade them from attacking. Inputting an aggression factor of 6 produced a German loss of 96 bombers!, Now come on chaps the Spitfire was good but not that good! I also intercepted a formation of unescorted Stukas by 30 Hurricanes this will be a virtual slaughter but alas, no. I lost 6 Hurricanes with no loss to the enemy.

Reading the documentation provided with the game, I came to the conclusion that Mr Nicholas Palmer (the game designer) knows very little about aircraft of the 1940 period. He describes the HE111 and JU88 being the heaviest bombers but the slowest, true on the first count but wrong on the second. The superb JU88 was the fastest bomber available to the Luftwaffe in 1940. He then describes the DO17 as one of the quickest — sorry but he's wrong here too, the DO17 with a full bomb load and its armour protection was only a little faster than the HE111, the slowest of the German bombers. He then goes onto describe the JU87 Stuka as the fastest. Come on! This infamous, ugly, grotesque looking aeroplane could rarely get above 150 mph with its bomb-load. Surely this is obvious.

He seems to have led you by the nose too, which surprised me, he described the small part played by Beauforts and Defiants which you mentioned in your review. Beauforts? BEAUFORTS!?. Beauforts were torpedo bombers which played no part in the battle of Britain he must mean Blenheims, mustn't he?

Also, and importantly, the damage inflicted on radar stations by the Germans is really OTT. Throughout the whole battle, the Germans only managed to incapacitate one radar station, Ventnor on August 12 for a considerable period. Other attacks carried out that day by ERPRGR 210 against radar stations in Kent and Sussex were repaired by the next day. Even the Germans confess that such targets were difficult to hit. But in this game they seem to have a field day. One or two bugs are present in the program resulting in Lock-Ups and Crashes and some quite comical results, like the 0 Dorniers returning from a raid on Middle Wallop after being slaughtered by the fighters based there.

The Germans seem to follow no plan of attack, attacking targets randomly. Despite all these faults I found the game very enjoyable, but I must say it's not cracked up to what it is supposed to be.

I've never found a war game yet where the computer made an intelligent move. In reality an aggressive, ruthless enemy would exploit your mistakes, instead they plod along relentlessly to a prearranged goal. Does anyone know of any games that actually do this? Maybe I'm playing the wrong ones? Maybe I should write my own?
Mark Pollock, Middlesbrough, Cleveland

PS I've never managed to fight more than one day on *Their Finest Hour* in the campaign game. I've either been slaughtered or I've slaughtered them in one day.

I was aware that my knowledge of that era was rusty but until your letter arrived, I wasn't aware how rusty! You're right, of course, in thinking the reference to Beauforts should have said Blenheims. I'm glad your enjoyment of the game wasn't spoiled too much by the flaws. However, plenty of other people have still found the game more of a challenge than yourself. Anyway, in future, I'm going to take more time in ensuring that at least I get the facts right . . . For your trouble, I'm giving you twenty pounds worth of software. Please get in touch and let me know what you would like.
SM

SWORDS AND SORCERY TIPS . . .

Dear Sean,
At first, I found *S&S* very difficult to play, what with my unfamiliarity with the selection procedure, and all the rules I had to observe. After a few goes, or lives, I managed to get the hang of it and now play it regularly with my ongoing character 'Thomas Covenant'. Sounds familiar? My biggest niggle with it is the routine at the start for inputting the character's name — since it doesn't print up what you type in until ENTER is pressed, I ended up with 'TTTT00 0TTT00 HHOM' on my first go. I also play *AD&D* regularly, and I think S&S compares very well — it eliminates the need for other people and can be played whenever I feel like it. I'm beginning to identify with my *S&S* character now, so this makes it more D&D-esqie.

A few tips: By now, most players of *S&S* must know what effect practising with each of the masters gives so I'll leave that out. I think these are the correct prices for goods in the armoury: Sword 20 Dragon's Teeth: Spear 9 DT: Staff 14 DT: Shield 16 DT: Armour 40 DT: Helmet 7 DT: Gold 20 DT: Wine 5 DT: Pie 8 DT. Note (i) pie is essential. (ii) You can select any item as a last choice if you can't afford it.

The magic numbers I've looked at after each action, and I believe this is their meaning (in order as they appear on screen). Defence (ie armour), Fighting Skill, Skill as a Thief, Magic Power, Max. Unarmed Combat Ability, Physical Strength, Weapon Damage Bonus, Code of a Special Defence, Max. Hit Points, Jumping Ability.

I've also noticed: (a) For every 3 monsters killed, 1 pt is added to fighting or magic skill depending on which menu was used prior to the monster's death. (b) Disarming a trap successfully improves thief abilities (c) But smashing a chest decreases them, but can improve strength. (d) Jump skill can be improved by practising JUMPING but this makes you hungry, as does (e) RUNNING.

Always try to talk to monsters. Try not to start battles as this makes them more hostile. Thanks for your time.
Craig Lemon, Braintree, Essex

. . . AND MOANS

Dear Sir,
I've had the game since early December and it is rarely off my Speccy. Since you ask, no, I've not completed it yet. I've gone into every room in the four quadrants except the last. I have collected the four fish, three keys, two sabatrons but no book of Zob (assuming it is on this level). All this gear has done me no good at all and I'm running out of ideas.

This brings me to my main complaint on this game. After having it for only a week or so, I ordered the Advanced Players Guide and Level Two pack, seeing that they were advertised for release at the end of December. Yet here we are in April and still no sign of them. Ever since the end of January I have rung PSS every two weeks and every two weeks they say it will be ready in 10 to 14 days. Whilst I realise delays do happen, why is it always two weeks? I have even spoken to the programmer who did say that most of the delay was due to him finding a way to enlarge Level Two to 10 quadrants and so the second section will be much bigger than the first. But really what I need is the guide as this may provide some help for me.

A small point that does concern me in Level 1 is that there are three bottles, which when drunk out of cause the program to Crash. Is this making the completion of the game harder for me? As you mentioned in your introduction last month, I do believe that a game like *Swords and Sorcery* does belong on the strategy section, as would any RPG. They are quite separate from Adventures. Some of your competing magazines do agree with us and do divide their articles like this. At this point let me ask if anyone knows why more RPG seem to be available on the Commodore computer, than the Spectrum?
John Dent, London

PSS have run into unforseen problems all the way along with their development of Swords & Sorcery *and I'm afraid you are likely to be one of many caught out by the delay with associated products. If it's any consolation, from what I've heard about the new products, they should be worth waiting for. If you really are fed up with waiting, I can only suggest you contact PSS again and try and reach an alternative solution.*

The reasons why more RPGs are available for the Commodore are threefold. Both the Commodore itself and role playing games are American phenomena resulting in a bigger market for this type of product. Then there's the advantage of Commodore having a standard disk drive. They may be slow but they do allow more memory to be accessed — something which role playing games especially benefit from. Hopefully, PSS will rectify the situation by making S&S *modular, thereby negating the immediate need for massive storage facilities.*
SM

And that's it for this month. Next month, more on *S&S*, some news on home grown stuff . . . and of course, anything else you care to write to me about. The hallowed address is FRONTLINE FORUM, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB.

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On the SCREEN

ON THE SCREEN is a brand new section in CRASH, sponsored by **Rainbird**, the publishers of *The Art Studio*, which is without doubt an excellent utility. (And we're not just saying that because **Rainbird** are coughing up a few quid in sponsorship money — if you don't believe us, read Franco Frey's review in the Christmas Special TECH NICHE)

This page is intended as a showcase for all you talented chaps and chapesses out there who are busy doing artistic things on your Spectrum Screen — every so often we'll print a selection of pretty pictures that have been sent in as SCREEN strings. The reward? Well fame, for a start. **Mark Jones** of Northampton is going to be famous from here on in, as his pictures are kicking off the new page. Mark's just about to leave school and is looking for a job as a screen designer . . . interested software houses give us a ring, and we'll pass on Mark's details. Fortune might also come your way too, you never know . . .

But whatever happens, you'll get a souvenir if one of your artistic submissions appears in this new section of CRASH, because **Rainbird** will arrange for Dimension Graphics to do an A3 full colour screen dump of you piccie(s). Then the screen dumps will be mounted in a lovely frame before they are sent back to you to hang on your wall and impress friends with. Nice, Huh?

First of all, we'd better say a big **THANK YOU** to Dominic Handy for turning Oli Frey's logo for this page into a real Spectrum Screen. Thank You Dominic!

Now on to the star of the very first **ON THE SCREEN** . . . Mark Jones sent us a tape with no less than eleven Spectrum pictures nestling upon it, and everyone was impressed with the range of his talents when the demo program was loaded up.

We had a riffle through, and came up with a couple of our favourites for the inaugural (LMLWD) ON THE SCREEN page from Ian's portfolio . . .

Yellow Submarine

Once again, Mark shows his skill as a copyist, borrowing strong and clear images from other media — this time straying away from the microchip in its many manifestations and entering the world of animated films in search of subject material.

A composite of images from the film, the jolly Yellow Submarine of the title is placed firmly in the centre of a group of blue meanies, which hem it in, preventing escape from the screen.

Sabre Man

More in the way of a pocketbook sketch, this Spectrum screen could find a place in the field notes of an anthropologist or botanist. Once again, the character which lends its name to the whole composition is placed firmly in the centre of the image area, but it is the frog that looks happy, not the human.

A little extraneous vegetation lends balance to the composition, which is clearly an example of Mark's Green (or Jungle) period.

The Balloon

Tastefully produced in simplistic black and white, this picture reveals a street scene full of hidden menace.

Sneaking up behind the central character is a decidedly evil being, rendered entirely in black, half humanoid, half serpent. The very personification of mobile evil.

Ghosts and Goblins

Inspired by the arcade machine which is now the subject of a Spectrum conversion by Elite Systems, this interpretation of a demon prancing in a moonlit graveyard needs little by the way of explanation. A very neat pastiche of the glorious graphics available on the original arcade machine, toned down and simplified for the Spectrum, but taking full advantage of the smaller machine's limited capabilities, nevertheless . . .

So there you go. The first four pictures appear in the ON THE SCREEN Gallery, and will soon be hanging on the artist's walls, courtesy of **Rainbird**. If you think your Screen Artwork deserves a wider audience, don't hesitate to send a tape in to **CRASH GALLERY, CRASH TOWERS, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB**. Don't be shy, fame and fortune could be yours, and at the very least there's a good chance of winning an A3 framed screendump . . .

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MANTRONIX

Producer: Probe Software
Retail price: **£7.95**
Author: **Syrox Ltd**

Well aren't you the bloodthirsty little mercenary? After years of zapping, splatting, maiming and killing persons as a hitman operating illegally, you've finally been given the licence to go legal as the State has recognised your 'talents' and awarded you Bounty Hunter status.

Being in another class to the majority of inept killmerchants employed by the State, you decide to go straight to the top and search out four extremely notorious thugs hiding on planet Zybor. Xtro II, Ariel Head, Maz Porka and Yokohama are a quartet of particularly vicious people who would soon as kill a man as look at him. Their redeeming feature, from your point of view, is the 100,000 credit bounty placed upon their ugly heads.

The official bounty hunter's kill kit includes a Mantronix: a relatively nasty cyborg that is controlled remotely by its supervisor. The main advantage over sending in a Mantronix as opposed to a real man is that if a energy blast hits it, the Mantronix won't be splurged into a mish mash of blood and string bits over the surrounding square kilometre. A Mantronix hit by an energy burst merely loses one of his nine supplied shields.

Remaining safely in your craft, placed in geostationary orbit far above the madding crowd, you can coolly and cruelly guide the remote controlled robot to the lair of the four desperados lurking on Zybor.

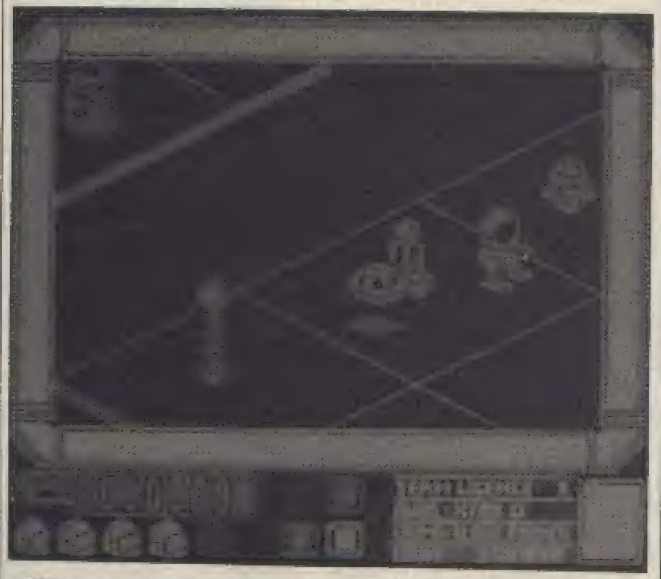
The view screen shows an Ultimatesque 3D view of Mantronix and his surroundings in glorious monochrome. Four-directional control is supplied, and a fire button activates a laser cannon. Mantronix moves around diagonally, and if the robot goes of screen another flips promptly into view. There are a thousand or so of these screens and Zybor's landscape is a bit bleak — nothing much survives on the surface of this planet. The laser comes in handy for despatching the mindless baddies that constantly hassle Mantronix as he plods around under your command. If a Zyborian nasty should happen to bump into Mr M, he loses a shield.

There are numerous bits of equipment hanging around Zybor's rather desolate land and picking up a certain item by wandering over it gives Mantronix the power to destroy a pulsator, the criminal team's life source. Also worth collecting are power cubes: with all eight in the possession of your robot, the conveyor belts that limit Mantronix's area of movement reverse in direction.

All the conveyor belts are totally invisible and are only detected when Mantronix puts his feet onto a section of floor that is moving, and is moved in the direction of the belt's travel. Invisible barriers also exist on the planet surface, so the scenic route is often needed to get somewhere specific . . .

The game is up once all four baddies have been despatched, though this is not a trivial task, considering the vast amount of wasteland to be explored.

A spiked nasty casts a menacing shadow as it approaches at head level. Things are beginning to look up — a few credits are in the bank now that a power cube has been collected



Two hovering nasties close in on your Mantronix remote control cyborg as it stumps around looking for the next arch-villain on the list. So far, the credit meter registers earnings of zero

CRITICISM

● " Mantronix **is a sort of** Alien 8, **but you can wander around practically where you want, apart from the invisible walls, conveyor belts and other things that are there but not on general view. The detail is of the high standard that is expected of modern day 3D graphics, but I'm afraid gameplay suffers from a lack of objects and other characters. The sound is a very well done two channel simulation on the title screen, but during play there's only the constant clicking of metal feet which got on my nerves very quickly. I found the game, as a whole, was quite fun to play but the playability could have been improved — the bounty hunting became a bit laborious after a while.** Mantronix **is fairly well priced at £7.95, but the more expensive versions of this type of game are probably more addictive.** "

● *" At first sight I was quite impressed with this game, but I wasn't taken in by the pretty graphics for very long. Pottering around the playing area is fairly simple and finding the various items scattered around the place has more to do with luck than skill as you start off from a different place every game. Fortunately, you are provided with lots of lives at the start of the game but the nasties are particularly vicious, so completing the game will take a lot of skill and patience. Graphically, there is nothing new here, although the graphics are quite pretty and very well detailed. I liked the sound: there are two tunes one on the title screen and one on the 'game over' screen, as well as a few spot effects. Generally, I found* Mantronix *a little shallow — there isn't really enough going on to keep me playing for more than a few goes at a time.* "

● " As 3D games go, *Mantronix* isn't that bad and compares well against the glut of such releases currently swamping the market. It's smooth and slick, recreating a full three dimensional action quite competently, though the game itself is a mite bit dull. If you're not into arcade adventures then it's very dull indeed. The game idea itself isn't very original and basically comes down to walking, shooting and collecting. Reasonably good value for fans of this type of game, I suppose. "

COMMENTS

Control keys: Q, S, P, L moved in the two diagonals, 1/2 pause on/off, CAPSHIFT BREAK resets game, bottom row to fire
Joystick: Kempston, Cursor, Fuller, Interface 2
Keyboard play: responsive
Use of colour: monochromatic playing area
Graphics: neat, detailed and jolly — playing area a bit empty
Sound: nice tunes, a few effects
Skill levels: one
Screens: 1,000 ish
General rating: A competent variant on a well tried 3D arcade/adventure format

Use of computer	**76%**
Graphics	**77%**
Playability	**71%**
Getting started	**73%**
Addictive qualities	**71%**
Value for money	**74%**
Overall	**73%**

LEGEND OF THE AMAZON WOMEN

Producer: US Gold/Silvertime
Retail price: **£7.95**
Author: **Simon Finch**

Lady Wilde and her infant daughter are the only survivors of a plane crash. Waking up, concussed, in the middle of the Amazon jungle, Lady W realises that her daughter has been kidnapped by Amazons, and she sets out to rescue her child.

Driven on by her maternal feelings, during her quest Lady Wilde has to enter into one-on-one combat with a series of Amazon warriors, dodge high and low flying arrows and nasty spikeballs hurled out by vicious plants, and contend with dragons. Setting out with little more than a leotard and a club, she makes her way across a large scrolling landscape split into ten zones. Ms Wilde can't move through the landscape unless she kills each and every Amazon Woman who bars her path — and there's no shortage of pugnacious tribeswomen . . .

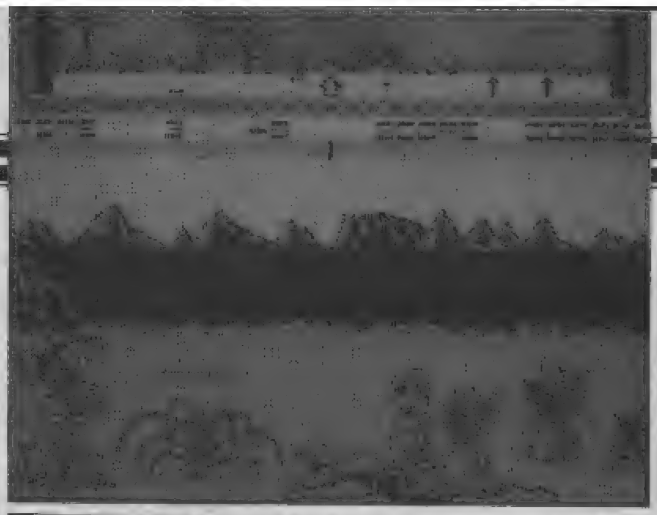
Your heroine can walk left and right as well as jump and duck, and she has three fighting moves in her repertoire. The Chop delivers a mean overarm blow to the bonce of the opposing warrior if she is in range, while Thrust aims the weapon to the midriff and Slice is a ducking, hacking move. To begin with, the Amazons are armed with clubs, but after zone four they turn up with swords in hand, and the girls in zones eight, nine and ten are axe-wielding madwomen. Lady Wilde can swop her weapon for that of a vanquished opponent, but the exchange seems to be mainly cosmetic — you don't appear to gain extra reach or power from different weapons.

The top third of the screen is devoted to a scrolling radar system which reveals about three screens-worth of the landscape in miniature, below which icons representing Lady W, her opponents and jungle nasties are displayed. The Aggressive Aristocrat appears as a chunky arrow containing the number of lives she has remaining, while the Amazons appear as slender vertical arrows. Spikers — nasty plants which hurl energy sapping projectiles — are also shown on the radar, but dragons are impervious to the scanner and pop up without warning in the last four zones.

As in *Fighting Warrior*, arrows whizz through the playing area, zooming across the screen at head height and ankle level. Contact with an arrow or spiky vegetable projectile, like a biff from an Amazon's weapon, reduces Lady W's energy reserves displayed on a horizontal bar under the radar. Each Amazon enters the fray with lots of energy bar which has to be worn down before she'll die co-operatively, and allow the heroine to continue on her quest to rescue darling daughter.

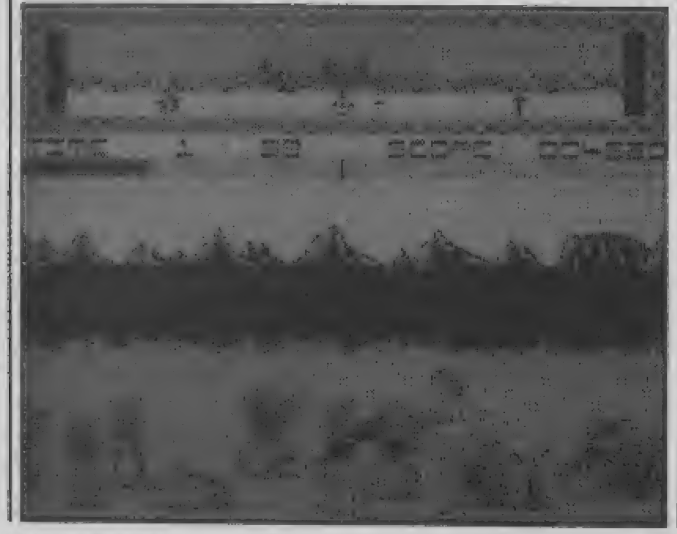
During a scrap, both combatants gain a little energy if they rest, but just to make the rescue mission that bit more tricky, Lady Wilde is up against the clock. If she doesn't get to the end of a zone within the four minute time limit she loses one of her four lives. Points are won for each blow landed, for killing an Amazon, avoiding an arrow or spiky projectile, and for killing dragons. At the end of a zone a bonus of ten times the number of seconds remaining on the clock is added to the score. Killing an Amazon earns a bonus of ten times her intelligence level. Intelligence level? The inlay states that the Amazon warriors have 'floating intelligence', set according to the level on which they appear. This means the further you get into the game, the smarter your opponents.

Should you fight your way through all ten levels of the game, Lady Wilde is reunited with her offspring and a happy ending ensues. Are you woman enough to enter the jungle?



Aahhh! Lady Wilde has shuffled off this mortal coil, right next to a primitive idol. Cameron was just beginning to idolise her when that arrow finished her off.

BOP! Lady Wilde lands a hearty biff on the Amazon warrior who is blocking her path. Cameron's certainly got the hang of this beat em up! That spiky thing on the radar to the left of Lady W's arrow is a Spiker — a real mean vegetable.



CRITICISM

● **" Oh dear! Another fighting game. If it was full of new ideas and new moves I wouldn't complain, but it's a simple variant on the theme. The attacking moves are very limited, and really aren't good enough when compared to the sixteen moves available in most beat em ups. The graphics are quite neat, and the women are nicely animated but the game seems to lack some of the addictive qualities that should be there. Taking everything into account, it's not a bad game, but after a while the challenge begins to wane and boredom sets in. I think it's a bit too similar to other fighting games to be anything special. "**

● *" Legend of the Amazon Women strikes me as a sort of* Fighting Warrior, *starring women, and not too impressive at that. The game has nice graphics with a few spot beeps but it's nothing out of the ordinary. I found this game as unplayable as* Fighting Warrior *and the game idea is even more boring — every woman I came to fight was the same as the last. Sometimes they had swords, sometimes axes, but there still wasn't enough variety to keep me attached to this game — even if there was a load of long-haired women running all over my telly. Nothing special, overall. "*

● *"* While there are a few neat touches in this game, including the smooth parallax scrolling and time limits to complete each level, taken as a whole *Legend* is nothing special. Sometimes the characters blend into the background, making life a bit tricky. The way in which the characters lope across the screen is strongly reminiscent of *Tir Na Nog*, while the scrapping sequences reminded me of *Fighting Warrior*. If you're into beat em ups, this is another one for your collection, but otherwise it has little to offer. "

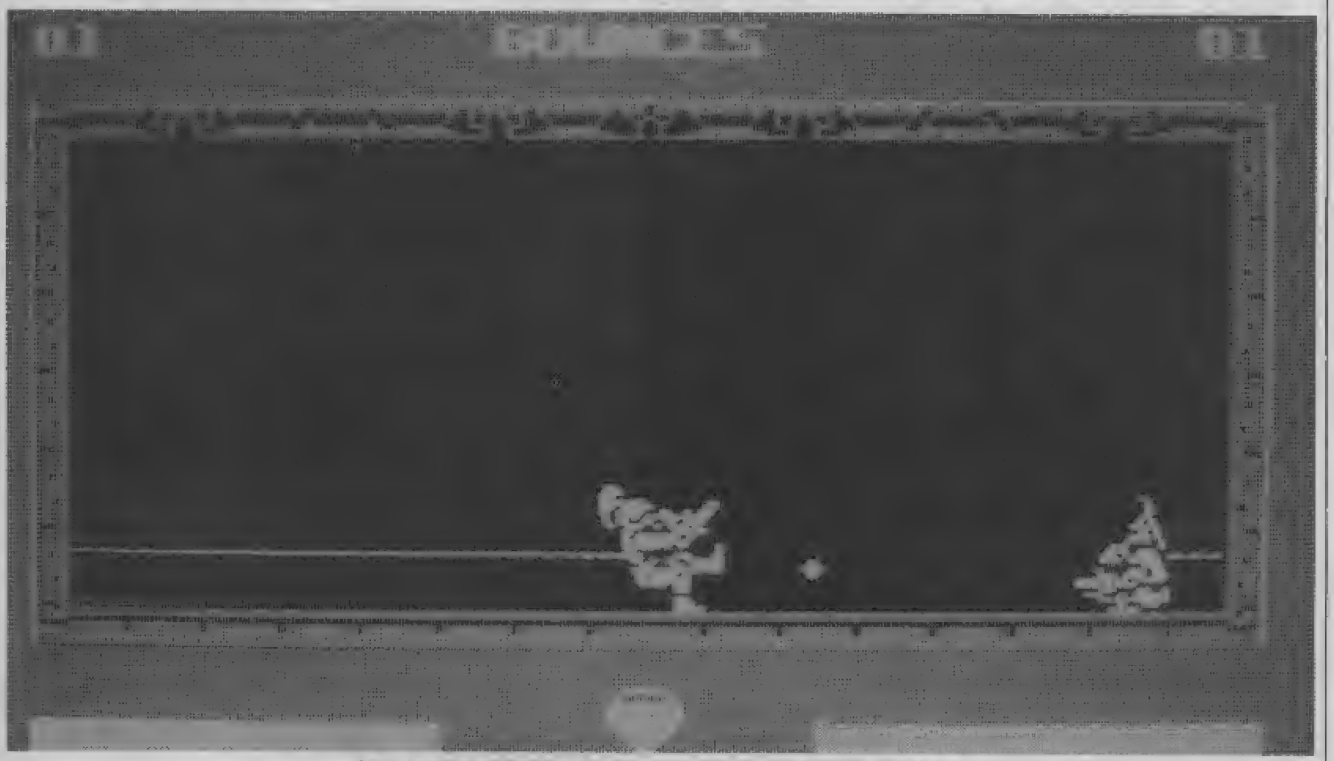
COMMENTS

Control keys: Z back, X forwards, M duck, K jump, X & L thrust, M & L slice, K & L chop, X & K jump forwards, M & Z change weapon; H pause, S start, Q quit
Joystick: Kempston, Cursor, Interface 2
Keyboard play: responsive, sensible layout
Use of colour: mainly monochrome
Graphics: smooth parallax scrolling — animation a bit *Tir Na Nog*gish
Sound: nice tune plus biffing noises
Skill levels: one
Screens: ten level scrolling landscape
General rating: Adequate fodder for fighting freaks

Use of computer	**74%**
Graphics	**77%**
Playability	**71%**
Getting started	**80%**
Addictive qualities	**68%**
Value for money	**68%**
Overall	**70%**

BOUNCES

Producer: Beyond
Retail price: **£9.95**
Author: **Denton Designs**



Taking a tumble in the BOUNCES arena — the player on the right has just been yanked against the wall by the laccy band and collapses in a heap!

Bounces is the super-sport of the future, despite the fact that it's played by a couple of dudes dressed up as a viking and a knight-in-armour.

Eric and Ashley (for it is they) compete in a sort of ball-game come sword fight which can be played by one or two players on the Spectrum. The action takes place in an enclosed arena, and both players are linked to one end of the court by a piece of elastic which continually pulls them back. Friction soled shoes are their only ally . . . An overhead pipeway fires a ball into play and the aim of the game is to shoot the ball into one of the goals in the ceiling. The ball ricochets off the walls, floors and ceiling of the court at great speed and is is quite capable of bowling a player over.

Players hold a catcher in one hand and the ball may be seized and retained if it is in reach by pressing the fire button. Releasing fire shoots the ball back into play. A player's arm may be moved to eight different positions, and the ultimate aim is to shoot for goal, although if all else fails, direct confrontation is quite good fun. Try bopping your opponent over the head or poking him in the stomach with the catcher!

Status bars monitor both players' energy levels — collisions with the back wall, the ball or the opponent's catcher result in energy loss. Sand trickling through an hour glass indicates how much time has elapsed since play began: the game is played in two ninety second halves and in good sporting spirit, you get to change ends half way through.

The players can bend down, jump up, stump forwards and backwards during a bout. After each game finishes a results screen appears which keeps a running total of Eric and Ashley's respective victories.

Points are scored for bopping your opponent with the catcher or a well-aimed ball as well as for popping the ball into one of the three ceiling goals at the other end of the arena. While a player can recover energy by taking a rest on-court, running the energy bar into the red results in temporary paralysis and a set of three undefended goals for the opposition to aim for.

CRITICISM

●"Bounces **is quite a neat game. I'm not convinced it's excellent, but it's quite good, and relatively challenging. I don't agree with 'Sport of the Future' though: I can't see masses of footie fans following this every Saturday in 20something-or-other! There are different ways to play, and it's easy to build up a personal style, though I can see it getting boring after a while. The ten quid price tag is a bit high, and the game could be improved upon in quite a few ways. Nothing stunning, really.** "

●" *I had a little trouble getting started as I wasn't supplied with any instructions, so I had to learn how to play it from scratch. I had just about mastered control on my fourth go. The graphics are very pretty, and there are no attribute problems or graphics flicker. Sound is fairly well used, although a tune would have added to the atmosphere of the game. I don't really see this game doing terribly well, as it costs too much. For a tenner I would expect a few more adversaries and the odd change of scenery too.* "

●" *Bounces* is one of the better games from the Denton Design team, after the apalling *Transformers*, and it combines smooth animation with some well drawn characters. When the men move you can see their bodies lunge forward trying to break the strain of the cord which stops them from bashing the other man to bits. When they hit the wall the legs of the men do actually fall from underneath them as they crumple up. I found the game hard to play at first, but once the rules are understood you can have a very competitive game with your opponent — be it the computer or a human friend. *Bounces* is a very strange sports game which is most fun in the two player mode. Beyond have got a game which is very playable — it requires a keen eye to judge where the ball will bounce off to next. *Bounces* is a good game if you like something out of the ordinary. "

COMMENTS

Control keys: 1 up, 2 down, 3 left, 4 right, 5 fire
Joystick: Kempston, AGF/Protek, Fuller, Interface 2
Keyboard play: a bit tricky
Use of colour: straightforward
Graphics: neat
Sound: spot effects
Skill levels: two
Screens: one
General rating: An interesting, playable game that is a bit on the expensive side

Use of computer	79%
Graphics	80%
Playability	79%
Getting started	80%
Addictive qualities	77%
Value for money	67%
Overall	75%

MUGSY'S REVENGE

Producer: Melbourne House
Retail price: **£7.95**
Author: **Beam Software**

After getting thrown into the slammer for his original scam, Mugsy is free again and in search of a fast buck. It's 1919, America is winding itself up for the Depression and the most relevant change noticeable to Mugsy is the introduction of Prohibition.

Since alcohol is now illegal, a large black market has sprung up, offering very high profit margins. Being an astute hoodlum, Mugsy decides that this is the racket for him. Everything is set for *Mugsy's Revenge*.

Those of you familiar with the original *Mugsy*, (which is on the B side of the cassette) will realise that *Mugsy's Revenge* follows a very similar format.

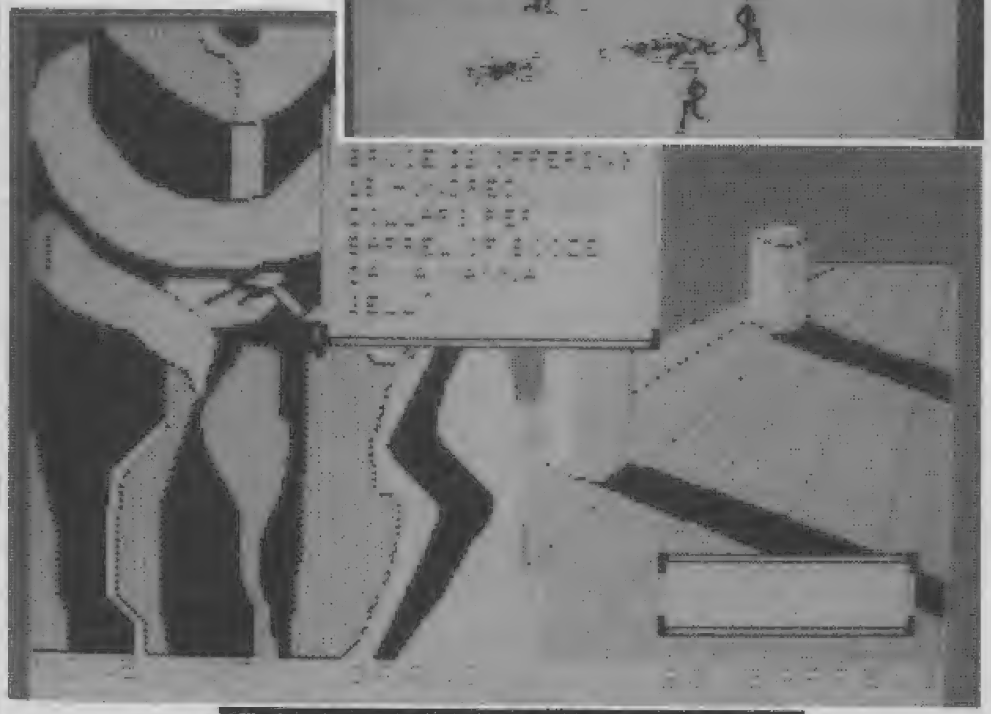
Mugsy's aim is to regain control of his empire by taking advantage of the Prohibition situation, and investing the £50,000 that was safely set aside before the cops caught up with him. Conversations with a right hand man supply the information needed, and a list of options available is presented. All the relevant day-to-day decisions faced by a gangster are put before you: how big a bribe should be given to the cops? who would you like rubbed out? and so on. The central decision rests on the number of barrels of liquor to buy and sell — shrewd deals at the start provide the capital needed to buy Speakeasies later on in the game.

If things get rather nasty then your top man scarpers, dropping you into an arcade sequence in the middle of a gun-battle. This section has Mugsy running about to the command of left, right, up and down keys. Fire lets loose hot lead from the revolver supplied, and the idea is to eliminate the Feds and avoid shooting the ladyfolk who parade around. Get hit too many times and it's Game Over.

Information is passed to you via a window superimposed over one of several detailed backgrounds. These backgrounds change after a few choices have been made, and every now and again a small animated scene pops into view showing a bit of a scuffle at Gino's pool hall. After the whole cycle has been run through, a year is deemed to have passed and a synopsis of your progress is presented.

If too many bad decisions are entered or you run out of money the game finishes. If, however, Mugsy manages to keep around for ten years, then Prohibition is lifted and a detailed analysis of Mugsy's progress is supplied.

Shooting it out with the Feds in MUGSY'S REVENGE



The henchman lets you know that Boozy Bruce is offering a hundred dollars a barrel for hooch. Wanna sell?

CRITICISM

●" Other than the great graphics there's not much to Mugsy's Revenge. I think the game is too much of a copy of Mugsy, and the gameplay is almost the same. Once you begin to play it, after a year or so has passed in the game, you are being asked the same questions — it got on my nerves. The movie clip shows you the year's events, and the animation is great but there are some jerky patches. The arcade game isn't that spectacular, and after a few people have been killed the game goes dead slow and is almost impossible to play. "

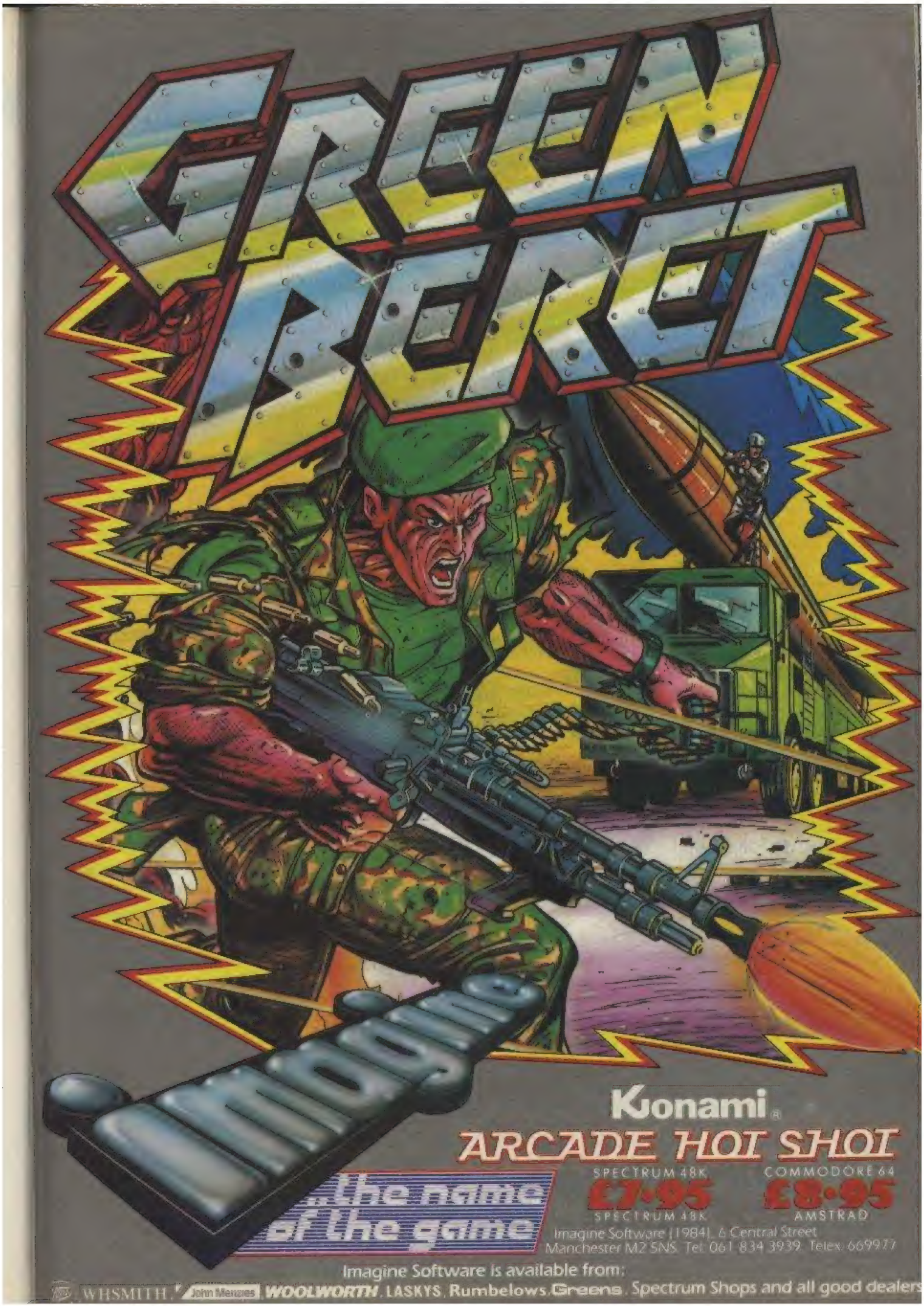
●" *I was expecting a real advance on* Mugsy, *but I was wrong: it's more of a step backwards. I wasn't compelled to carry on playing after I'd seen a few screens and heard the music once. The arcade screen isn't much fun — it's very easy and gets very dull once you've been through it a few times. There are no sound effects during the game although there is an excellent tune on the pool hall screen. I expect that if you stuck with it for a while, the game would probably become fun, but I hadn't got the the patience. "*

●" *Mugsy's Revenge* could have been a good follow up to the hit *Mugsy* but I felt that the game was too repetitive. After a while I got heartily sick of the snide comments that the person running my operations kept churning out — over and over I heard the same jokes. I guess the screens take up a lot of memory, but it would have been better if the game had branched off more to the strategy side of the plot. With the great *Mugsy* on side B of the tape, the package presents tremendous value for money, but really it's a case of 'nice graphics, shame about the game'. "

COMMENTS

Control keys: I left, P right, Q diagonally up, Z diagonally down, B, N, M, SPACE fire
Joystick: Kempston
Keyboard play: fast and responsive
Use of colour: pretty and well done
Graphics: also very neat
Sound: one tune, very nice it is too
Skill levels: one
Screens: a good few
General rating: A rather disappointing follow up to a great game

Use of computer	74%
Graphics	79%
Playability	68%
Getting started	70%
Addictive qualities	59%
Value for money	75%
Overall	67%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Konami
ARCADE HOT SHOT
SPECTRUM 48K
£7·95
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COMMODORE 64
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AMSTRAD
...the name of the game
Imagine Software (1984) 6 Central Street
Manchester M2 5NS Tel: 061 834 3939 Telex: 669977
Imagine Software is available from:
WHSMITH, John Menzies, WOOLWORTH, LASKYS, Rumbelows, Greens, Spectrum Shops and all good dealers

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Managing Director
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Skinner Lane, Leeds LS7 1AX

MERELY MANGRAMMERELY

I return to the office and my desk this month to find that Robin (Meat eater) Candy has flown the coop. Suddenly the battles for office space have ceased and, strangely, I find myself feeling a little lost without the prospect of the odd scuffle for lebensraum. Ah well. Life must go on, I suppose. Down to business . . .

Things are looking up on the adventure front at the moment, with *The Price of Magik* virtually complete according the the **Level 9** teamsters, while **CRL** are on the verge of releasing *The Very Big Cave Adventure* from the **St Bride's** schoolgirls as well as the sequel to *Bored of the Rings from* **Delta 4** which goes by the name of *The Boggit* — both should be on the shelves during May, selling for £7.95. Still in adventure mode, we should have sight of **Incentive**'s *Graphic Adventure Creator* very soon, maybe in time for a close look next issue and **Ariolasoft** are re-releasing the excellent *Valkyrie 17* written by the **Ram Jam Corporation**. Finally, *Subsunk* fans will be pleased to learn that **Firebird** (more of them anon) have just brought out the sequel to the game on the re-launched Silver Range. *Seabase Delta* is in the shops now.

A massive role-playing adventure is due to arrive in this country from France during the middle of July — called *Mandragore*, it is to sell for £14.95 for which you get 260K's worth of program on two cassettes, an instruction booklet and a ten chapter book setting the Medieval scene. Four characters are involved in the game, and up to four players can gather round the keyboard participating in the same session. "Magic, Battles and Heroism" are all involved, according to the press release, which is all that's arrived in the office at this very early stage of play.

Still gently on the adventure theme, our very own Derek Brewster is about to have his latest game released on the **Mastertronic** MAD label. *Con Quest* is an animated 3D arcade adventure starring a little fellow by the name of Oscar who has just bought a castle and found it full of demons. The game is icon driven, and should receive a full review in the July issue. US Gold, too, promise to release an adventure based on the film Return To Oz any day now, in which you have to rescue your chums from the clutches of the evil Gnome King, once again without any text input.

On a more arcady tone, **Alligata** are confident that their *Pub Games* collection should be in the shops by the end of June. It's a sort of Old Flatulence Bitter Decathlon, in which the player can have a go at playing the whole series of games through sequentially or opt to practice single events. Bar Billiards, Darts, Dominos, Poker, Pontoon, Skittles, and Table Football all appear on the tape, and the player's performance will be affected by a 'Booze Factor'!

Budding investigative journalists will soon be able to practise their skills in *N.E.X.U.S* from the software house of a very similar name to the game, **NEXUS** in which you are pitted against an evil ring of drug smugglers. Search for your pal who has been kidnapped and keep sending news back to base to make sure you get the scoop of the century. No firm news on the game's arrival yet, however.

Denton Designs, having regrouped a little bit after some of the founder members of the team decided they preferred being totally freelance, are working on a Prisoner of War game under the title of *Stalag* — more than that I do not know.

The First screenshot of N.E.X.U.S. on the Spectrum, according to NEXUS the software house. They should know, after all . . .

Another firms with plans for your Spectrum carefully laid is **Domark** who should be releasing a sort of sliding block puzzle game featuring caricatures of famous faces, not unreasonably called *Splitting Images*. The next James Bond game is scheduled for a July launch and there's already £25,000 in cash sitting in a suitcase in the Domark offices. *Eureka II* is nearing completion and when it appears in August the cassette is to include a solution to *Eureka* as well as details of how to claim that suitcase full of loot for your very own.

Sadly, I was a little misinformed about **Microsphere**'s current project, *Contact Sam Cruise*. I sat down last month and told you that the game had been scrapped — untrue. It should appear around August in a much bigger and better form than originally planned. Sorry!

The latest news from **PSS** arrives in Ludlow, and we learn that an early July release is on the cards for *Tobruk*, a classic Axis versus the Allies wargame. The Commodore hit, *Theatre Europe*, in which the player fights through a theoretical modern day nuclear and chemical war between the NATO Alliance and Warsaw Pact countries, should also be available on the Spectrum by the time you read this. Both games are to sell for £9.95

Football fans intent on following the World Cup this year will no doubt want to avail themselves of US Gold's *World Cup Carnival* package, which includes a full colour poster for you to chart the progress of the competing countries, stick-on flags, and badges as well as a computer run league table and a knockout footie competition. Out soon, they say.

On the Budget front, there's no sign of any of the new **Players** games in the office, although they were promised by Richard Jones of the new label's parent company, **Interceptor**. Ho hum. *Rupert and the Ice Palace* is coming shortly from **Bug Byte**, priced at £2.99 which should keep Rupert fans happy, anyway.

Elite Systems in Walsall just missed completing *Ghosts and Goblins* in time for a full review this issue, but with luck we should be able to take a close look at that one next month, along with their other arcade conversion still underway, *Paperboy*. Scooby fans will be pleased to learn that Elite have signed **Gargoyle Games** to come up with a game that takes up the licence option that never quite got used . . .

Firebirdwise we have received evidence of the relaunched Silver Range in the form of *Cylu* and the old favourite *Booty* as well as the aforementioned *Seabase Delta* and *Spiky Harold* which gets the full treatment elsewhere this issue. Still no sign of *Empire*, and although we *were* promised a copy of **Odin's** *Kimera* — to be called *Heartland* now that Firebird have taken over marketing for Odin — not even an inlay made it to Ludlow. Hmm. *I.C.U.P.S*, the other Odin game, is probably still a long way into the Firebird future . . .

Orpheus have finally completed *The Young Ones*, and rumour has it that *Tujad* is written, too. It seems that Orpheus don't feel they can do the game justice themselves, however, and it looks as if we'll have to wait for them to sell the rights to another company before we get to view it.

Boredom is likely to set in before we finally get to see *Fairlight II* from **The Edge**, and a similar state of catatonia (LMLWD) is beginning to set in as far as **Softek**'s *The Writer* and *The Artist II* are concerned. No matter how often Tim Langdell is phoned, nothing ever arrives. Tum Te Tum. *The Last Word* is on its way from **Saga**, so it looks like Softek are going to lose the race to get a word processor reviewed in these hallowed pages.

Dr Who is still having problems with his time machine, but the Tardis should be making a landing towards the end of May according to the latest update from **Micro Power**. Maybe he'll bring *The Force* with him?

And with those few words it's time to sign off this month and return to the peace and tranquillity of my little cottage, away from the stresses and strains caused by the tension of waiting for games promised months ago to arrive in the office.

Just three of the re-releases on their way to the shops

PREVIEW

Coming soon to a Spectrum near you!

BOUNCE AND FLY WITH MIRRORSOFT

MIRRORSOFT have three games scheduled for Spectrum launch during May: *Action Reflex* from **Medusa**, programmed by Christian Urquhart, and *Biggles*, the official game of the film currently being written by the team at **Dalali**, a programming house that has previously specialised in conversions rather than original games. Last but not least, *Dynamite Dan II* — previewed in the April issue — should be available by the time you read this.

BOUNCING THE BALL

Action Reflex is a ball game with a difference — you play the part of a chequered football which has to negotiate a hostile environment set out in the best arcade adventure flip-screen format. An overhead pipeway, which is in fact a vacuum delivery system, runs along the top of most of the screens in the game, and play begins as your ball is sent down a vertical tube which retracts into the ceiling once the ball has been deposited at the start point.

Bill the ball can be rolled along the ground to the left or right, and the amount of energy you impart to the ball governs the speed at which it rolls. Chevrons in the status area light up to indicate the amount of force currently applied. Understandably, as the star of the game is a ball, it can also bounce - pressing up on the keyboard or joystick initiates a vertical bouncing action and the longer the up direction is held, the higher the ball bounces as it builds up momentum. Careful timing allows the ball to bounce left or right if the appropriate direction key is hit at it lands on the ground.

The game will contain three, or possibly four, twenty five screen courses for the ball to negotiate, to complete the game you will have to go round the courses four times in all. Each course has to be completed within a time limit — it's burstville and game over if you run out of time — and each time around, the game gets harder.

A range of nasties lurks in the underground system: some of them are static like pins, magnets and disintegrator grids, while others are mobile like the giant green froggy fellow who shuffles from side to side with his tongue hanging out. Flames burst out of nozzles in the floor, boxing gloves bop unsuspecting balls towards pins on the ceiling and nozzles shoot darts at the Round One.

In the final version of the game, points will be scattered around the playing area, in handy denominations of 200, 400 and 600. Roll over them, and their value is added to your score and a lifebelt, hammer or key is collected, respectively. At the moment the objects appear on screen, rather than the point values. Lifebelts are used to cross pools of water, one belt being used up for each crossing, while hammers can break down glass barriers in the later levels and keys open short-cut tubes that lie on the floor which the ball can unlock and zoom through in safety.

Christian is slaving away in an anonymous bedsit not far from Mirrorsoft HQ as this is being written: the finished game should be in the shops roundabout nowish (as you read) priced at £7.95.

An early screen from ACTION REFLEX. Froggy hops from side to side — contact with him pops the ball and sends you back to the start of the screen. The magnet is activated by the floorpad under it, and if the ball doesn't escape the magnetic waves quickly, a dart is shot into it. Nasty

CHOCKS AWAY!

Biggles, the game of the film, is another major Mirrorsoft project due to come to fruition during the month of May. Following the plot of the film, in which Jim Ferguson, a modern-day New Yorker discovers he is the time twin of Biggles, the game puts you into Biggles' flying boots. Your mission is to save the world from the ravages of a deadly new weapon.

For £9.95, you get a package which contains three linked games, which have to be played through sequentially, before the finale — a flight simulator which emulates a modern American police helicopter.

Section one of the game plonks the player in the seat of a World War One biplane — and it's time to set out on a reconnaissance mission, flying over enemy lines to photograph the secret weapon and its site. Understandably, the enemy want to keep their secret weapon secret, and send up their own air aces to thwart you while pumping flak into the skies. Dogfights ensue.

Survive the dogfight sequences and snap the new weapon, and it's time to play a *Commando*-type ' gamelet. A network of caves and trenches has to be negotiated en route to the weapon test site, this time on foot with little more than a pistol and collection of grenades for self-defence. The third game sequence is set in the present day, in New York. The photographs taken in part one of the game have to be recovered from the developers — and despite the fact that you're a super hero from the past, the police and SAS are not impressed. A helicopter has been scrambled by the police department and armed officers lurk on the rooftops, taking pot shots at your flying-helmeted form.

Having snatched the snaps from the photography shop and stolen the police helicopter, Biggles has to fly the strange whirlybird back to his own time, across enemy lines and then destroy the nasty weapon. For maximum points, there are a few chums held captive by the baddies, who could do with rescuing . . .

Sadly, the programming team at Dalali were too busy completing the game to sort out a few taster screen shots to go with this preview, but we managed to arrange a little £1-off deal for the film itself. Scamper off to the local cinema with the cartoon strip printed here, and you can get into the mood for the game.

Like the adverts say, "Do you want to be a Hero?". See the film, get *Biggles*, the game, and you can have a go!

TROTTING ROUND TOMBS

The crapulent (LMLWD) reporter, Legless O'Donnell comes across a chest in the Antechamber. Does it contain treasure? Maybe, because that headless horror seems keen to prevent him from opening the box. It's the Guardian of the Tomb, a real limb ripper of a character. Legless really will be, unless he moves sharpish

Following on the heels of *Quazatron*, their latest release, Hewson's are nearly ready to send *Pyracurse* winging its way out to the shop shelves.

Written by Keith Prosser and Mark Goodall, the game takes the player back to the 1930's and the action takes place in a multi-level tomb in the middle of the South American jungle. Famous archeologist, Pericles Pemberton-Smythe has gone missing — he set out to explore the tomb of an ancient god and never returned. Now his daughter, Daphne, is on the trail of her father, accompanied by a newspaper reporter, Legless O'Donnell, a dog and one of her father's friends from the British Museum — Professor Kile.

The game is controlled *Avalon* style, using the keyboard or a joystick to manipulate a set of menus in the status area, pressing fire to make a selection. During play, you can swop control between the four characters, and issue commands to your colleagues if they are in the immediate vicinity.

Each character has a unique personality, with appropriate attributes — the reporter, for instance, is a stereotyped hard drinking hack who's big, brave and regularly drunk. Daphne, on the other hand, is a feminine type, who faints quite often when she's frightened and is far from being a muscle-bound hulk.

The playing area scrolls smoothly inside a large window on the screen, with the character you control remaining roughly in the centre as the scenery moves around him or her. In the final version of the game the window will be a little smaller than it is shown here — Keith and Mark have enlarged it to make playtesting that bit easier. *Pyracurse* should contain three or four levels — the final decision has yet to be taken — and there will be around 250 screens-worth of Andean environment to explore.

Suitably tomb-like nasties lurk in the game. Mummies and animated statues are more than willing to cause a bit of grief to the adventurers, and pits and traps have been set in the tomb by the artisans who built it. Treasure and items vital to completing the game successfully have also been hidden away and need to be found and collected. The characters don't have energy levels which are depleted by attacking nasties as in most other games — they either survive or are ripped limb from limb, literally! Fortunately, the chap who's tomb this is, developed an enzyme which he used to regenerate his physical form, thus attaining immortality. Sadly, the Spaniards killed off all his followers and no-one was around to sprinkle the enzyme on the ex-god's corpse. So he died. The enzyme can be found in the tomb by the explorers, however, and used to regenerate a killed companion.

Although Daphne is being paid by the newspaper, which has send Legless to cover the story of her search for Daddy, it is important that she finds him. If he's alive, she picks up a lot of loot from the paper and will be pleased to be reunited with her father. If he's dead, Daphne will be sad — but at least she'll be able to prove that Daddikins is no more to the solicitor who is holding his estate in trust for her, and she can at last inherit a fortune.

PREVIEW

RESCUING A DAMSEL IN DISTRESS . . .

Elite Systems are on the verge of releasing another arcade conversion, GHOSTS AND GOBLINS. Gary Liddon bemoans the fact that the finished version didn't quite make it in time for a full review . . .

Well there he is, kneeling in front of his intended just about to pop the question and what should happen but a very big nasty demon person appears in a puff of smoke. Swooping down quickly, the demon digs his talons into the fair maid and makes off with her to his palace far, far away. The brave knight, after seeing his misuss dragged off by a scaly monster with a serious complexion problem, is very annoyed indeed and decides to rescue his fair bride-to-be, post haste.

If you're the Demon King and have the ability of flight as well as the front door key to the castle, then getting to the palace is really quite easy, even if you're weighed down by eight stone of screaming damsel. If you're the knight in Elite's conversion of the Capcom arcade game, *Ghosts and Goblins*, however, an evil tortuous path stretches before you, guarded by a fair host of evil nasty men, submen, and creatures not even remotely menlike but still very nasty nevertheless.

The route to the Demon King's castle is split into sections, and each section has its very own bona—fide Devil fervently guarding the portal to the next section. These cloven hoofed meanies take a fair old pounding before withering up and dying, but the merest touch from their talons kills a chap dead.

Mr Knight is a very versatile type of person indeed and can perform all manner of different actions activated via the keyboard or a humble joystick. Left and right are fairly straightforward, though the knight himself generally doesn't move — the landscape behind him scrolls by. And how nicely it scrolls too, quite an achievement for a poor little Spectrum. The scrolling is very, very smooth indeed: while the game was being played it even had the odd passing Commodore owner looking twice.

Jumps are quite handy for leaping the odd encroaching nasty, while down causes our hero to squat, hunched against the ground in missile-avoiding mode. The fire button activates the weapon currently held by the knight. To begin with, the knight is equipped with a good and trusty sword and the fire button sends out a stream of swordlets in front of the hero whenever it is pressed. Pot dragging zombies emerge from the ground in the graveyard, and if they are killed, a weapon is left on the ground. Running over a grounded weapon effects an exchange. Some of the weapons available are very useful indeed, while others have a very limited range.

Your knight has just taken a hit, and scampers through the undergrowth in his undies

Encased in a suit of armour, the knight is not killed by the first blow landed by an attacking felon, but he loses his tin suit and is left to run around in his long johns. The second hit from a baddie results in death. Still, with eight lives in store all is not lost — but the knight returns to the start of the current level rather than continuing from his deathbed.

There are four levels in the game — the first begins in a graveyard, replete with headstones and zombies which emerge from the ground. A little further on, death spitting plants are encountered before the hero has to board a raft to cross a stretch of water and reach the second half of the first level where witches riding broomsticks wait, ready to dive-bomb him. If he gets past the witches and defeats the demon guarding the doorway to the next level, he enters the ice palace.

The ice palace is a zone of platforms and ladders which scroll behind the hero in all four directions. Scampering up and down walkways the lovelorn lothario has to avoid or kill the nasties before escaping to the Gorgon level. He suddenly finds himself in a town, where the buildings house evil flying gorgons. A window shutter pops open suddenly and zzoom, out flies a nasty. Shinning up ladders and stomping baby demons is all part of the fun on this level.

After the last guardian has been despatched, the knight can enter the cavern system that leads to his beloved, held captive at the end of the game by the Demon King.

Ghost and Goblins was programmed by Keith Burkhill, freelance bytesmith responsible, among other things, for *Commando*, *Pogo* and *Missile Attack*. Living in Wales Keith really isn't all that far from sunny Ludlow. So when we accidentally managed to corrupt the preview copy of the game sent from Elite's HQ, Keith agreed to bring his latest version along to CRASH Towers in person, and we snapped away merrily. These shots are likely to be very close indeed to what the end user (you) is going to receive as Keith reckoned he'd have the whole thing finished within a couple of days of his visit. Sadly, this was just a tiny bit too late for a full review . . .

Next month's CRASH should contain that full review, but it looks like the game will be on the shelves before we get to tell you all about it. Meanwhile, why not turn to pages 38 and 39 of this issue, for a little more news about *Ghosts and Goblins*?

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TANTALUS

Producer: Quicksilva
Retail price: **£8.95**
Author: **Paul Hargreaves**

The interstellar war is over and the enemy Jaglan Group has finally been wiped-out . . . bar one member, who has taken refuge on the planet Tantalus. The Centuri Alliance is eager to dispose of this deviant, so a special task force is sent to Tantalus to eradicate him.

Years ago, human combat was abandoned in favour of wars between specially created mutant soldiers. Mutants were developed for domestic and menial jobs, but a certain type of mutoid has been genetically engineered as the ideal fighting being. With sharp reactions and inbred cunning, they are ideally suited to tackle the Tantalus Problem.

Four mutoid Spikes under your command are on the planet Tantalus and it's up to you to negotiate a way around the booby-trapped defences and assassinate the Jaglan criminal. Four against one? Couldn't be easier. Ho, ho. Tantalus is a veritable rabbit warren of underground caverns and hidden passageways, over a thousand locations in all. The Jaglan deviant hasn't wasted his time.

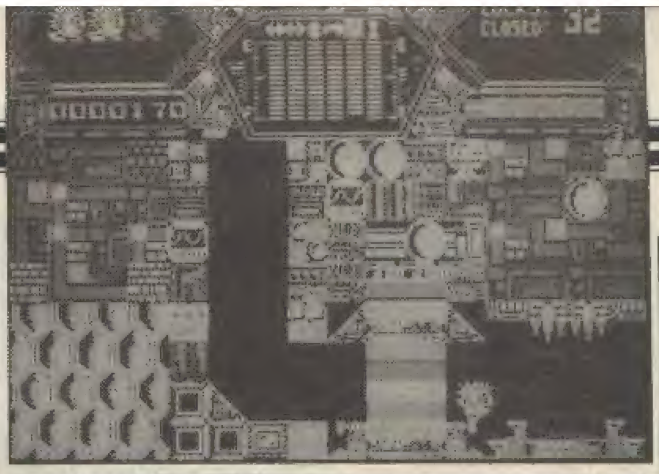
All those years in self-imposed exile have been spent setting up defences. Forty-eight different sorts of alien form a grand welcoming party for you. Forty-eight types of alien with sixteen different flight patterns, each one a different challenge. Although the mutant spikes are near perfect fighters, they are by no means invulnerable. Apart from the nasties floating around Tantalus, the deviant has rigged-up some pretty devious devices to ensnare intruders: lasers fire across gaps; lasers shoot down from the ceiling; roof spikes impale passers-by; bubbling vats of acid have to be avoided and sinister looking grabbers winch down from the ceiling and do nasty things. There are dissolving walls, seemingly innocent doors that suddenly destroy you and apparently inanimate objects that are really rather deadly.

Before you can even think about eliminating the Jaglan deviant, thirty two deadly doors must be found and opened with the right key.

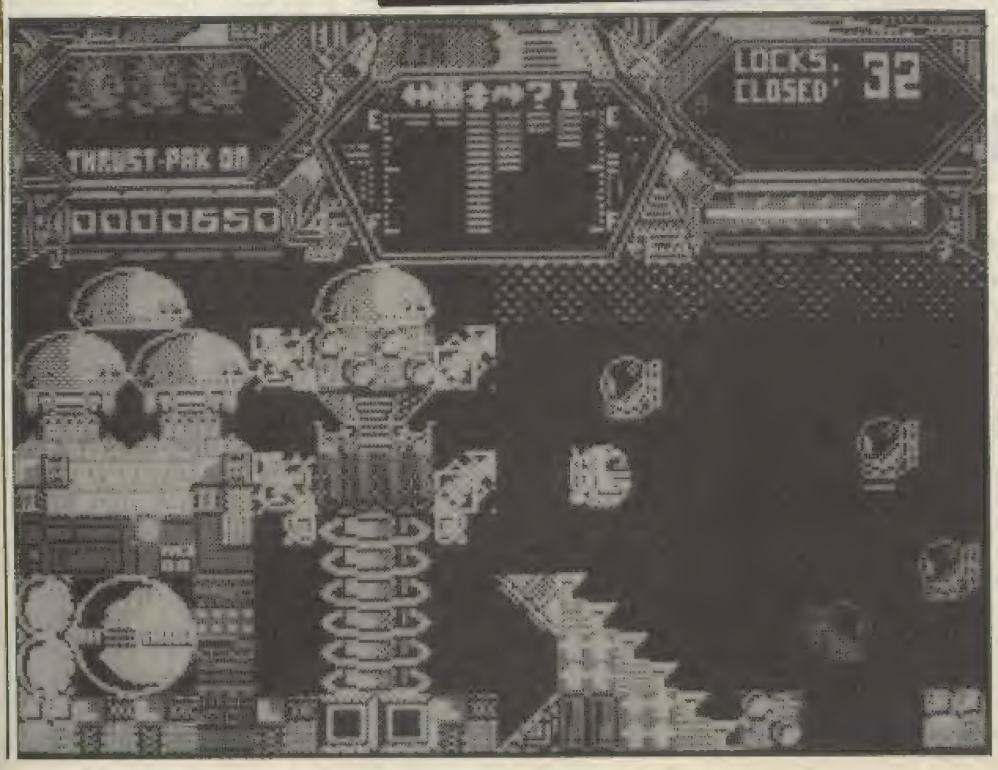
The mutants don't look much like the ultimate fighting creation — more like strange cuddly toys with no hands or feet and mohican hairstyles. They start off with jetpacks and can zoom around the fortress. Going through an airlock removes the jetpack, and the range of movement thereafter is limited to left, right, up, down and jump. In jet pack mode, Spikes can make themselves invisible for a few moments — very handy when in an awkward spot.

Spikes are provided with an elaborate weapon system. They have six weapons, each of which fires in a unique pattern and can only be used for a limited period of time before being allowed to recharge. Panels on screen monitor progress, showing how many doorlocks have been opened, the condition of each of the six weapons and the number of lives remaining.

This is the first game in a trilogy from the author of *Glass* - more to follow in due course . . .



Having just passed through an airlock on the bottom of the screen, the Spike has lost the Jet Pack and is about to pass through a laser curtain



Spike in his Jet Pack zooms along directly above a ramped stairway, doing battle with a gang of aliens

CRITICISM

● " Tantalus **didn't appeal to me at all, mainly because I've seen so many games like this before. Arcade/adventures aren't new and to make any impression on me, such a game has to have something different or original about it. This game hasn't. The graphics are nice and colourful, but not particularly well animated. The only bit I liked was the six types of weapon available — apart from that I got bored rather quickly, I'm afraid.** "

● " *As shoot em up games go,* Tantalus *is excellent. It is both addictive and very playable. The use of colour is terrific — the whole screen is covered in it, but I couldn't spot any colour clash. This game had many nice touches, like the different weapons. As you blast your way though the hundreds of sprites, the graphics and backdrops are well detailed and stand out. Eliminating the enemy is a massive task to embark on: overall, no disappointment in the game, which is very playable.* "

● " Though not a mega-fantastic game, I enjoyed playing *Tantalus* for a while. Colour is very nicely used and the game, while being very difficult, is good fun. I like it more than I did Quicksilva's last release, to say the least. The playing area is absolutely massive, and I found I could wander about for ages without having to recross my route. The concept of mutant punkoids is great, and I want one too!! *Tantalus* is big, colourful, fun and very difficult: I like it! "

COMMENTS

Control keys: Q thrust/jump, A change weapon, O left, P right, M fire
Joystick: Kempston, Interface 2
Keyboard play: fine
Use of colour: lots of it — perhaps a little garish
Graphics: densely packed, lots of variety
Sound: raspy spot effects
Skill levels: one
Screens: 1024
General rating: A large, colourful and playable game

Use of computer	77%
Graphics	79%
Playability	80%
Getting started	80%
Addictive qualities	76%
Value for money	75%
Overall	**76%**

THE SECRET OF LEVITATION

Producer: Americana
Retail price: **£2.99**
Author: **Michael Beresford**

Americana's first Spectrum budget game presents nine little puzzles to test and train your reactions and visual abilities on the path to complete mind-over-matter control. After each test you are shown a screen with a Sidha in his meditative position. The higher your score in each individual game, the higher the holy one rises on the reward screen and the closer you get to mastery of Levitation. So the inlay says, at any rate . . .

The first test evaluates your reactions. The screen shows four numbered Sidhas. Pressing 'Z' causes one of them to disappear at random. As soon a Sidha leaves, press the corresponding number key . . . Two clocks at the top of the screen show how fast you reacted. The aim, as in all the tests, is to score 1000 points.

Vibrant Vision is test Number Two. The screen shows a square with a doorway in the middle. Two lines appear for a fraction of a second behind the door, one line slightly longer than the other — you have to decide which one is longest.

For successful levitation the eyes must move in perfect harmony with the body. Using the joystick for the next test you must keep the Sidha as close as possible to a moving target. The routine lasts two minutes, and points are lost for straying too far from the mobile target.

The fourth test involves matching shapes to numbered examples in a race against the clock. Only times of forty seconds or less lead to respectable scores here.

Mind-body Mastery is the fifth game. Eight mazes have to be traversed in less than 1 minute 40 seconds. Contact with the maze walls adds a penalty to the clock.

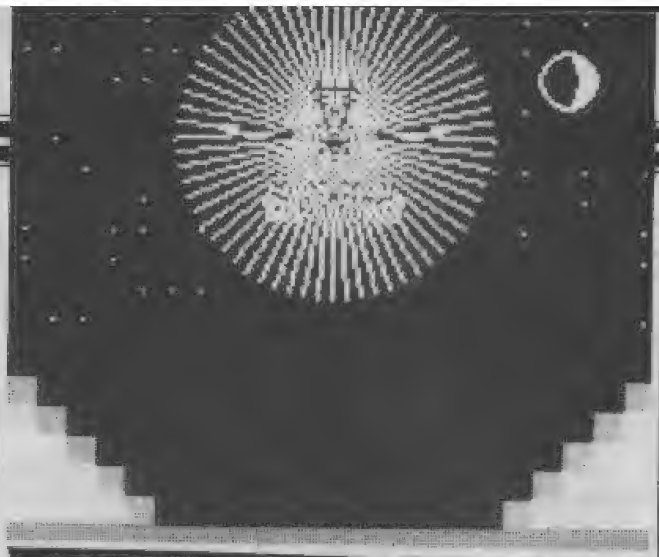
Eight numbered shapes appear at the top of the screen in the sixth test of *Agile Alertness*. As the Sidha moves along under each shape on the main screen, its identifying number has to be keyed in. Complete the game in less that 45 seconds to get closer to spiritual perfection.

Inner Integration requires the player to spot angular shapes hidden in abstract patterns, tracing the outlines with a cursor. All ten patterns must be found in under 1 minute 40 seconds.

The final test, *Fluent Function* involves counting rows of little Sidhas and entering the tally into the computer. Second time around, the symbols change and become digits just to add to the confusion.

The eight games are accessed from a menu, and can be practised over and over until perfection is reached. At any stage, calling up the Levigram produces a graphic display of your achievements so far on the path to perfection.

Amaze-ing. Testing Mind-Body Mastery on the path to perfection



Sidha takes to the air, performing mystical magic after a score of 1,000 points has been clocked up

CRITICISM

● **" The Secret of Levitation is one of the strangest games I've ever played and reminds me of the first games that you typed in from magazines. The basic idea is very simple and the graphics are very basic. The game does have a certain something, however, that keeps you at it for ages. I played The Secret of Levitation for about an hour before I got bored with it, and I still hadn't taken off. I'm sure this game would have been better priced at £1.99, but not a bad effort at the budget market. "**

● *" I haven't seen a game like this for ages, I was beginning to believe that software houses had learnt their lesson that games like this don't sell, even if they are dressed up with an original name. I didn't really have any joy playing this game. The graphics are a little poor — a few floating Gurus here and there — but they do their job. The sound is also sub-average. Not much here to keep me interested for any length of time. "*

● " I might have liked this game if there was a bit more to it. As it is, it's just a series of simple puzzles. Maybe some would argue that nine totally different games represent good value for money at £2.99, but I'm afraid I just don't agree. The graphics are below par, and much more could have been done to bring this product up to the sort of standard I expect. Overall, a very BASIC game that I don't think is worth much of anyone's time or money. "

COMMENTS

Control keys: different for each sub-game
Joystick: Kempston
Keyboard play: no problems
Use of colour: simple
Graphics: simplistic
Sound: beepy tunelets and so on
Skill levels: one
Screens: 9 little games plus score screen and levitating monk
General rating: Not a stunning start to a new range of software

Use of computer	42%
Graphics	39%
Playability	49%
Getting started	56%
Addictive qualities	44%
Value for money	48%
Overall	45%

THE YOUNG ONES

Producer: Orpheus
Retail price: **£7.95**
Author: **Richard Wilkins**

The saga of crazy-wacky student antics continues with Vyvyan, Rick, Mike and Neil competing for social domination in their seedy student digs. Comrade Bolowski, their landlord, has had enough of their sloveny living habits and is turfing all four out. You must help them pack up their belongings so they can leave.

To start, you choose which Young One you want to become, and a different set of belongings has to be gathered up for each character. The characters all act appropriately: Mike, for instance, wants to take his loud ties while Rick won't leave without his anarchic girlie dresses. Each character has to collect his belongings and put them into the appropriate moving-out container. Rick packs a rucksack, Neil has a wheelbarrow, Mike uses a suitcase and Vyvyan chooses the bin liner. Once these have been located it's a case of pottering around the house trying to get things together. Packing is made difficult because the other three also pick up some of your character's property.

The game is controlled via a nested menu system, with three main options: Action; Talk and Walk. Action enables you to pick up, drop, open, close, eat or smash objects. Talk puts words into your character's speech bubble — paying attention to what is said provides clues to the whereabouts of objects. The walk option allows movement

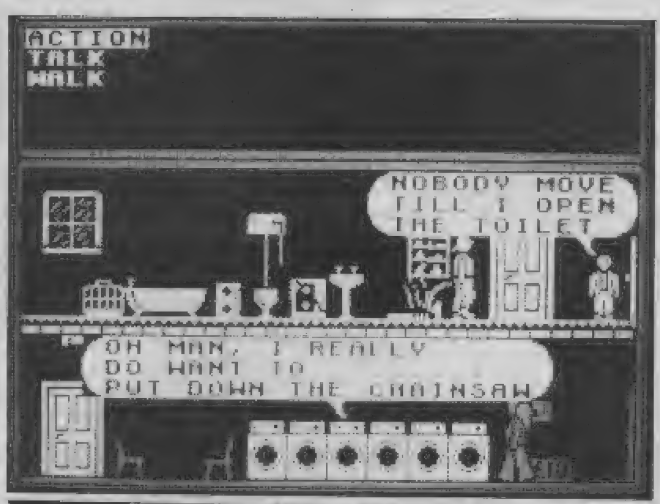
round the property. 'Walk' accesses a list of rooms, and selecting the required location moves your character. The radio and T.V to provide hints, too.

Once your character has packed up all his belongings he is free to leave the house and search for somewhere new to crash for the night...

CRITICISM

● **" There is nothing about this game that stands out or impresses me in any way. It's unplayable, unaddictive and generally boring. The graphics, although colourful, are full of colour clash; the character animation is jerky and a bit flickery and the sound is limited to the odd spot effect here and there. The one thing that really surprised me was the swearing! It isn't something that I've come across before in computer games. There isn't much to this game. I doubt even ardent fans of the series will be impressed "**

● *" I really wanted this to be a good game, but it's the exact opposite: useless. The inlay is highly amusing, but largely irrelevant to the game! The things said inside the speech bubbles are initially quite amusing, as you see the characters saying things you hear them say on the T.V., but after a while the language gets pretty appalling. The graphics are small and uninteresting, and colour clashes occur everywhere. I think* The Young Ones *is really sub standard. Orpheus' slogan reads 'never look back'. I wouldn't waste my time even turning around for a game that's as bad as this. "*



Selecting ACTION on the menu system, while Mike explains his toilet training system and Neil has problems with a heavy piece of machinery

● " Yes, the TV series was great, but I'm afraid *The Young Ones* computer game is a terrible let down. All it seems to be is an excuse for Orpheus to put a few swear words in the game and think that 'the kids' will love it. One problem with the idea, though, you've got to have a game to start with. Not so in this case. The only relevance to the TV series is that there are four 'guys' living in a building. You can't really play *The Young Ones* seriously in my opinion — more fun is had watching the other people in the house walking around saying very stupid things. When I played the game properly I got very bored, as there isn't much to it. I can't recommend it. "

COMMENTS

Control keys: P page up menu, ENTER page down menu, 0 to select
Joystick: Kempston, Cursor
Keyboard play: responsive
Use of colour: not very subtle
Graphics: just adequate
Sound: blips and burps
Skill levels: one
Screens: split screen play area
General rating: Oh dear!

Use of computer	56%
Graphics	49%
Playability	42%
Getting started	44%
Addictive qualities	40%
Value for money	40%
Overall	42%

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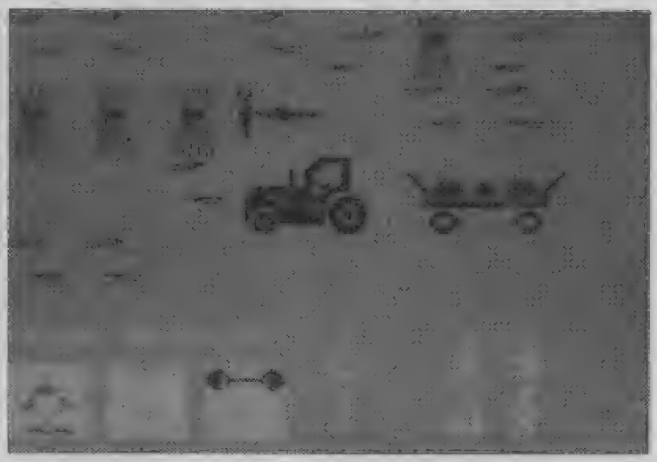
FRIDAY 13th

Producer: Domark
Retail price: **£8.95**

If you've seen the film(s) then you'll already know the background to this game. For the benefit of those who missed them, here's a quick summary: people staying at a quiet holiday camp at Crystal Lake find their peace shattered when a young boy, Jason, accidently drowns. His mother is so distraught at his death that she blames the other campers who did nothing to save him. One by one they are all murdered by Jason's Mum, until only one girl remains alive. She manages to kill Jason's psycopathic mother. All alone in the middle of the lake, the lone survivor waits while slowly the ghost of Jason rises from beneath its murky depths to take his revenge.



Chug chug goes the tractor. Buzz buzz goes the saw. Kill kill goes Jason, in Domark's FRIDAY 13th

The game picks up where the film leaves off. You are now a camper at the ill-fated holiday camp and Jason, predictably enough, is still wreaking havoc. It is up to you to find a sanctuary which Jason won't enter and then persuade the other nine campers to join you there before Jason sends them on permanent holiday.

At the start of the game the computer selects one of the ten campers at Crystal Lake, and you take on his or her personality. The holidaymakers all have individual personalities and react differently during the game according to their particular strengths and weaknesses. Jason is a cowardly soul and always attacks the person whose panic level is the highest. Although it is up to you to save your friends from a grizzly death, you are by no means immune from the growing frenzy of your fellow sunworshippers.

The status of your character during the game is displayed at the foot of the screen. Three windows are used to indicate the levels of panic, strength and sanity you possess. Gradually, as panic levels rise, the hair on the head of a little portrait in the status area begins to stand on end. An ice hockey mask — as worn by Jason — fills in on another window to indicate the mental state of the character you are playing, the more mask the madder you are! Strength is displayed via a barbell which rises and falls, mirroring the physical status of the hero or heroine of the tale as it unfolds. Ten little icons on the right of the status area represent the campers at Crystal Lake, and as Jason eliminates them their figurines are replaced with tombstones.

Jason scampers around the playing area selecting weapons from his arsenal and eliminating campers one by one, starting with the most panic stricken holidaymaker. The ultimate aim of the game is to save all the campers from an untimely end by killing Jason before he kills them. Although he's a homicidal maniac, Jason is frightened of a cross which can be found on the campsite — collect this and deposit it in a room and Jason can't harm anyone who stays with the cross.

Once a sanctuary has been set up by depositing the cross in the barn, church or house, you must persuade your playmates to take refuge. Walking up to a camper, it's possible to shepherd him or her to the Sanctuary you have established. These people are on holiday, however, and despite the fact that there's a murderous loony at the resort they're determined to have fun! It is quite hard to get them to stay indoors, and they regularly wander off to go sunbathing or even swimming in Crystal Lake.

Jason looks just like a regular holidaymaker — he can only be spotted when he's killing someone on screen. As it is impossible to distinguish Jason from the other characters, you may try to lead him to the Sanctuary, in which case he scares the campers off, and you have to move the cross to another location, set up a new sanctuary and start herding the campers to safety once more.

To even the odds a little in the game, Jason is careless with his weapons, leaving them lying around. There are ten in all and you can pick up and use a weapon you come across. Only one death dealing impliment can be carried at a time, though — there's no point in getting greedy. If you succeed in saving all the campers and kill Jason too, then he takes on the personality of your character and the game moves to the next level of difficulty where you assume the persona of another camper.

Half of the team of campers who "holiday" in FRIDAY 13th, the jolly murdering game from Domark

CRITICISM

● **" There was a lot of hype over this game, in fact the Newsfield office is still knee deep in headless rubber bats and plastic knives from Domark's visit a few months ago. After playing the game for a bit I feel that most of the hype was unjustified. Graphically,** Friday the 13th **hasn't very much to offer; the characters are blocky, undetailed and jerky as is the playing area. I also had a few problems accessing different screens so after a short time I had just about given up with this one, although I did go on to nearly complete the first level. The only thing that really appealed to me about this game is that you can murder your innocent friends and get millions of points by replacing the cross in the same room. I wouldn't recommend** Friday the 13th **though 'cos compelling it ain't. "**

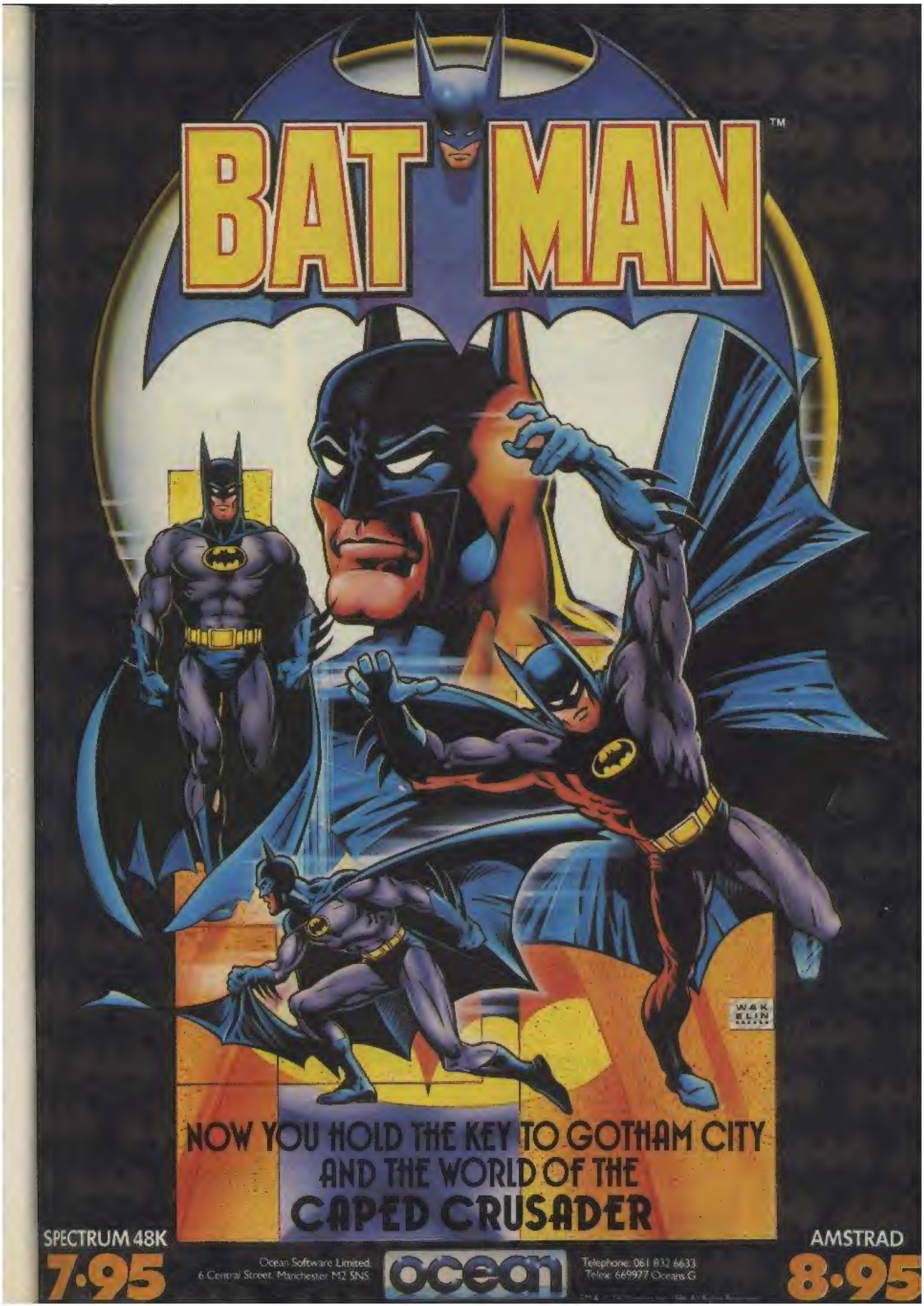
● *" The film is great, with Jason running around chopping people's heads off, but disappointment hits me once again. If Domark had tried,* Friday 13th *could have been a good game with such a scary storyline. On the inlay it says 'lock all doors'— but why? No spectacular graphics, and a few colours on buildings and more would be better. Sound is scarce as not much came to my attention throughout the game and qualities like this aren't going to keep your eyes on the screen or fingers on the keyboard for long. All I can suggest is close all windows and doors, hire a video and watch that instead. "*

● " For a while it seemed that Domark's standards were actually improving — *Gladiator* really wasn't that bad. *Friday the 13th*, however, sees the return of that old Domark bad taste and ineptness of production. I'm sorry, but it's just absolutely awful. What's really bad is that as with most naffo releases, the program's main selling period will be over by now and any punter who was going to be had by the excessive hype already has been. For anyone considering buying this release the fairest thing to say is have a look at it first as anyone who then thinks it's quite decent deserves the horrors that the game is replete with. "

COMMENTS

Control keys: Q up, A down, O left, P right, M fire
Joystick: Kempston
Keyboard play: adequate
Use of colour: not subtle
Graphics: rather crude, a bit grotty
Sound: the screaming the start is the best bit
Skill levels: 5
Screens: scrolling play area
General rating: Oh dear, oh dear.

Use of computer	44%
Graphics	31%
Playability	38%
Getting started	45%
Addictive qualities	32%
Value for money	25%
Overall	32%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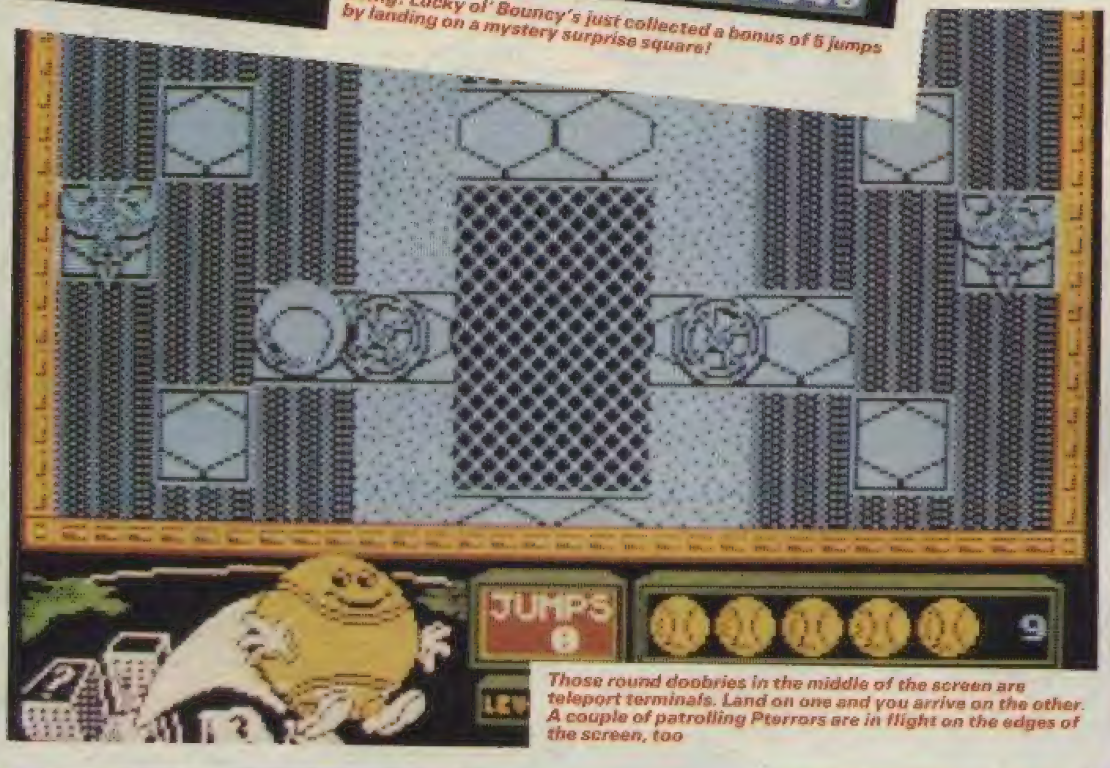
Boing! Lucky ol' Bouncy's just collected a bonus of 5 jumps by landing on a mystery surprise square!



Those round doobries in the middle of the screen are teleport terminals. Land on one and you arrive on the other. A couple of patrolling Pterrors are in flight on the edges of the screen, too

Boingitty, Boing. The wonder tennis ball sproings around level six under the guidance of CRASH BOUNDER playing Minion, Dominic Handy, who's dead chuffed with his high score (270 odd thousand at the time of caption writing, and still climbing)

On *Bounder* you have a little bouncing tennis ball to play with — but you're not going to be playing tennis. The whole ides of the game is to guide the ball through screen upon screen of obstacles while

B·O·U·N·D·E·R

A CRASH Smash

bouncing along the pathway of hexagonal paving stones that scrolls down the screen. It's a platform game with a difference!

There are 174 screens altogether, split into ten levels — your little bouncing tennis ball is really going to have his work cut out for him. The most general rule is to avoid anything that moves, and only bounce on the hexagonal parts of the screen. This isn't as easy as it might sound because all manner of nasties have been put in your way. There are piles of jagged rocks, stone walls which have to be circumnavigated, not to mention the odd light scattering of broken glass which punctures even the most resolute of tennis balls on contact.

Apart from the rocks and glass, a range of mobile nasties patrol the playing area intent on bursting your little bouncing chum. Binoculoids whizz round trying to knock the ball off course; Moscita birds swoop down on you; Stickits, Chomper Domes and Exocets do their best to live up to their names . . . you must negotiate your way around them all.

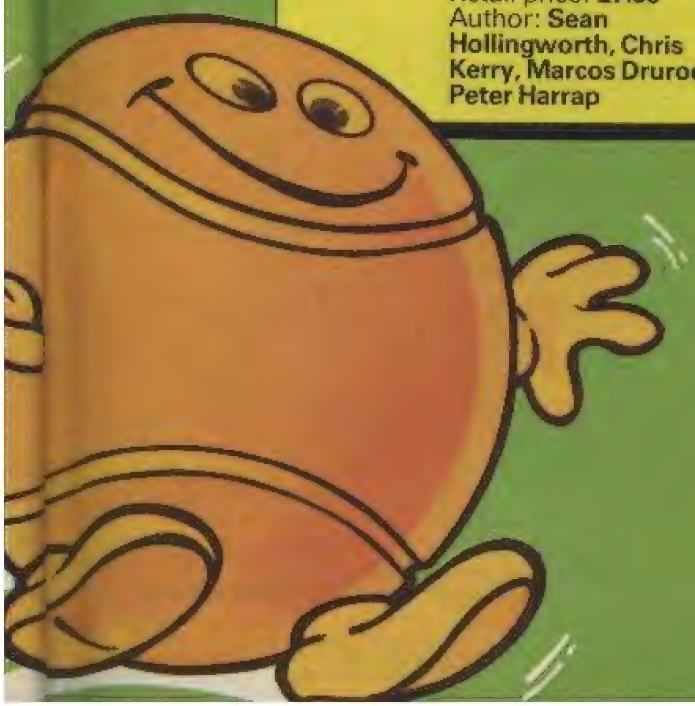
A stock of seven little tennis balls is provided at the start and a life is lost every time you stray off the yellow pathway or mix it with the nasties. There are a few allies in the environment, however, and the whole world isn't set against ol' Bouncy. Landing on a square with an arrow in it supercharges the next bounce and the ball can stay in the air for twice as long as usual. Teleports warp the ball to the next teleport square, thus avoiding any nasties lurking in between. Mysterious question mark squares conceal surprises: landing on one reveals the secret, which may be some extra bounces for the Bounceometer at the bottom of the screen, an extra life or two — or a nasty shock may be in store . . .

At the end of a each level, your tennis ball is booted through a goal and it's on to the bonus screen. You're presented with a screen full of question marks, each of which holds a worthy number of bonus points. The Bounceometer in the status area reveals how many boings are available to you on the bonus screen, and economical jumping is called for if maximum points are to be collected from the questionmark bank! An extra bonus is awarded if the ball lands on all the bonus squares on the screen.

During play, the ball bounces of its own accord, getting larger and smaller as it moves in relation to the ground — if left to its own devices, it ploughs onwards suicidally — so it's up to you to try and guide it away from certain extinction. If the ball does stray off the straight and narrow (although there's no straight but plenty of narrow in this game,) it plummets into the abyss below and a new ball pops up on a different part of the screen, usually where you least expect it.

One little yellow tennis ball is definitely dreaming wistfully of Wimbledon this year . . . it's much safer on the tennis court, even if you do get to hear some rude words.

Producer: Gremlin Graphics
Retail price: **£7.95**
Author: **Sean Hollingworth, Chris Kerry, Marcos Druroe, Peter Harrap**



CRITICISM

"At first glance Bounder didn't seem to be a promising game, but things soon changed! I've got to give it to Gremlin Graphics for originality — I have never seen a game like it before. Once you start off, bouncing all over the place, it becomes quite addictive, operating your ball and dodging low flying birds and other weird looking nasties. Okay, so there's only one colour per level, which some people might find a bit off-putting and dull, but the fast scrolling makes up for the lack of colour. Gameplay is quite fast so you don't get bored: there's no way this one can get monotonous. Bounder is a game I can recommend."

CRITICISM

"Bounder is just brilliant. I would say that the overall gameplay is definitely the best out of the three machine versions I've seen and the graphics are up to the very high quality that I've come to expect from Gremlin. The game idea is very old — a platform game — but the new angle put on the view of the action gives a whole new dimension, literally. The presentation is excellent, with good packaging and an excellently drawn title screen — there's even a little ditty to accompany the scrolling messages below the menu. The graphics consist of lots of very detailed baddies and goodies. Bouncing around is animated brilliantly, and the addictiveness is greatly increased because of the bonus screens which can improve your score tremendously. The great playability means you'll be coming back to this one long after you bounced your first ball."

CRITICISM

"This was one of the Commodore games that got played in the ZZAP! office next door by everyone. It has lost some appeal in the conversion onto Spectrum but it's good fun nevertheless. The graphics are fairly good, and the playing area is very complex so it's often quite hard to tell what is going on. The characters are all very nicely drawn and animated although they do tend to blend in with the surroundings a little. The sound is about average I suppose: there are a few spot effects during the game and a very nice tune on the title screen. Generally I'm not one hundred per cent impressed with this one, but it is quite playable and addictive."

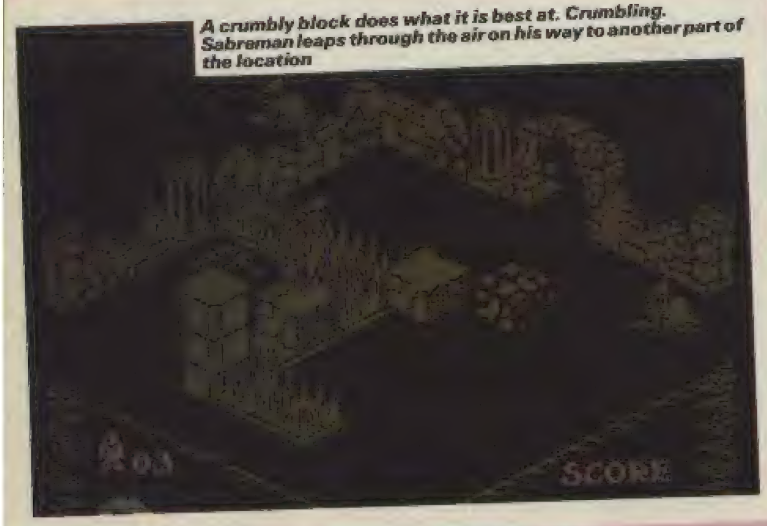
COMMENTS

Control keys: Q left, W right, L up, P down, M toggles pause, BREAK to quit
Joystick: Kempston, Cursor, Interface 2
Keyboard play: very responsive
Use of colour: simple but effective
Graphics: very neat animation, smooth scrolling
Sound: jolly title tune plus spot effect
Skill levels: one, ten levels to game
Screens: 174
General rating: A very original platform variant, neatly executed

Use of computer	88%
Graphics	91%
Playability	90%
Getting started	90%
Addictive qualities	89%
Value for money	88%
Overall	**90%**

P·E·N·T·A·G·R·A·M

A CRASH Smash



A crumbly block does what it is best at. Crumbling. Sabreman leaps through the air on his way to another part of the location

Sabreman is back! After escaping from *Underwurlde* via one exit which took him into *Knight Lore* and problems with a spot of lycanthropy (LMLWD), he can now set out on the quest for the PENTAGRAM.

Leaving *Underwurlde*, Sabreman pauses only to snatch up a copy of the Grand Arch Wizardry spell book before stomping off into the forest. No pith helmet for Sabreman this time — he scampers round in a hooded cloak, and can defend himself by hurling sparkling balls of magical energy.

And defend himself he must, for the forest is inhabited by a variety of unpleasant creatures that have a habit of suddenly materialising at just the wrong moment. Witches riding broomsticks and sleepwalking zombies can be zapped with a quick burst of magic, but their touch, like that of the unzappable spider creatures, is deadly. Sabreman only has a stock of five lives to hand, so care needs to be taken when killer nasties are in the vicinity.

Other manifestations, including ghosts, giant lice and amorphous blobs also turn up in the game from time to time, but they are not deadly — just a nuisance, getting in Sabreman's way and making life more difficult. They, too, can be despatched with a bit of well-hurled magic.

As is usual with Ultimate games, the inlay doesn't contain too many hints about the quest on which Sabreman has embarked, but it seems that sections of the PENTAGRAM must be gathered up and bathed in the waters from a well that lurks behind a wall of mantraps — runes must be found too, and then the PENTAGRAM finally becomes Sabreman's personal possession.

The forest locations through which Sabreman passes on his quest are presented in the same 3D perspective Ultimate used in *Alien 8* and *Knight Lore*, and the control system is also similar: the robed adventurer can only walk and jump forwards, and has to be rotated until he is facing in the appropriate direction before a move is made.

Progress through the locations is not always straightforward — sometimes sheets of spikes or mantraps block the pathway and have to be hurdled. Objects, including tables, logs and blocks of stone can be moved by shoving them or firing a blast of magic — handy, because getting through some locations is a problem in itself. Evil looking dogshead guardians patrol some of the entrances and exits, making trips between forest locations rather tricky.

A tune plays on the title screen and once the start key has been depressed, a few seconds elapse before the game begins — Sabreman doesn't begin his adventure from the same part of the forest each time, and the objects that have to be collected aren't always in the same location. As objects are gathered up, they appear in the left hand status area, under the little icon that represents the number of lives remaining. Each time a nasty is sent on the trip to oblivion with a blast of magic, points are added to your score, so it's not just a matter of gathering up the fragments of the PENTAGRAM: high-score chasing is part of gameplay.

The existence of *Pentagram* was first alluded to in *Underwurlde*, and now, nearly six months after it was first advertised, it has arrived. But Sabreman's trials and tribulations are still not over: *Mire Mare* and the future beckons the intrepid adventurer . . .

Producer: Ultimate
Retail price: **£9.95**
Author: **Ashby Computers and Graphics Ltd**

CRITICISM

" Ultimate have finally released one of the follow ups to Knight Lore and what a good follow up it is too. The graphics are of course in the Ultimate style, but people shouldn't complain 'cos it's a good idea and why shouldn't they use it over and over again? Ultimate, I feel, have put in more of a range of detailed graphics than the other games, and the nasties that keep materialising are very good and add to the whole game immensely, which means that there's no hanging about in your quest for the PENTAGRAM. I don't think you'll get bored with this at all. At ten pounds it presents better value for money than their other releases, and it's a must for all arcade/adventure players. "

CRITICISM

" Well what a long wait, but at last it's here! Pentagram is not that different from the rest of the trilogy of 3D games: nevertheless it presents a considerable challenge to complete and map. I still think Ultimate are lead the field at this sort of game, although Ocean's Batman is perhaps the best of the rest. The scene is well set by the packaging which creates a good atmosphere. Sabreman is controlled easily and precisely with no delay, although I noticed that the action tended to slow up when there was a lot on the screen, but that's not such a bad point — it gives you a chance to realise where everything is. Definitely another one to add to your Ultimate arcade adventure collection . . . "

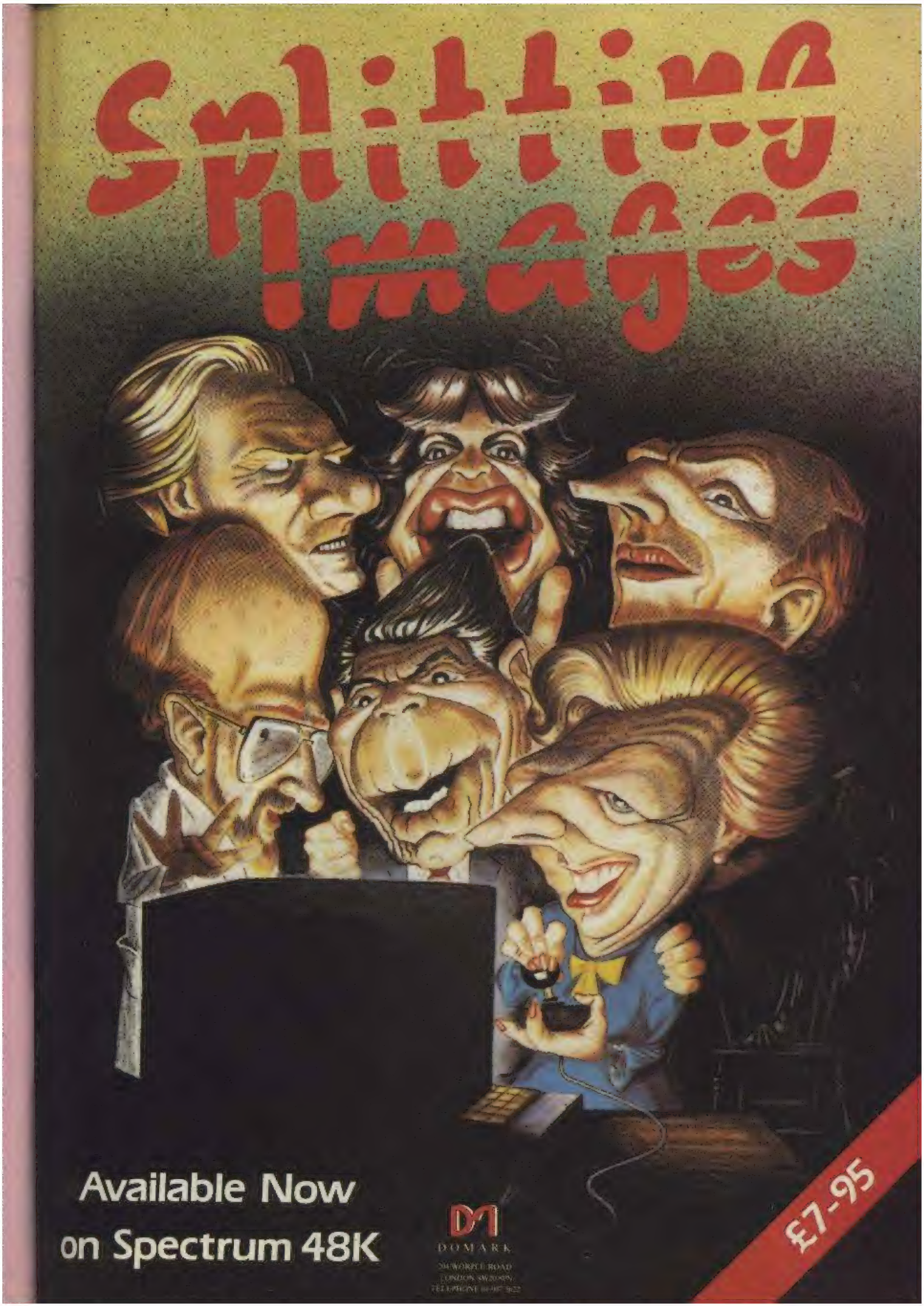
CRITICISM

" Ultimate's latest offering is definitely cast in the same mould as Alien 8 and Knight Lore, and as such is bound to appeal to anyone who enjoys a good romp through a maze of locations, solving puzzles along the way. The graphics are all pretty and well designed and solving the puzzles contained in the game should give even the smartest of Alecs ten pound's worth of satisfaction. It'd be nice if Ultimate came up with a totally new and different concept for their next game, though . . . "

COMMENTS

Control keys: Z, C, B, M left, X, V, N, SYM SHIFT right, second row to walk forward, Q, E, T, U, O jump, W, R, Y, I, P fire, number keys to pick up/drop, CAPS SHIFT, SPACE to pause
Joystick: Kempston, Cursor, Interface 2
Keyboard play: no problems
Use of colour: monochromatic, hence no clashes
Graphics: 3D style made famous by *Knight Lore*
Sound: tuneful start and finish music, plus spot effects
Skill levels: one
Screens: rather a lot
General rating: Sabreman fans can't afford to miss this one!

Use of computer	94%
Graphics	95%
Playability	92%
Getting started	90%
Addictive qualities	95%
Value for money	91%
Overall	93%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Klepto gets close to U8 droid on a yellow city level.

CONSOLES
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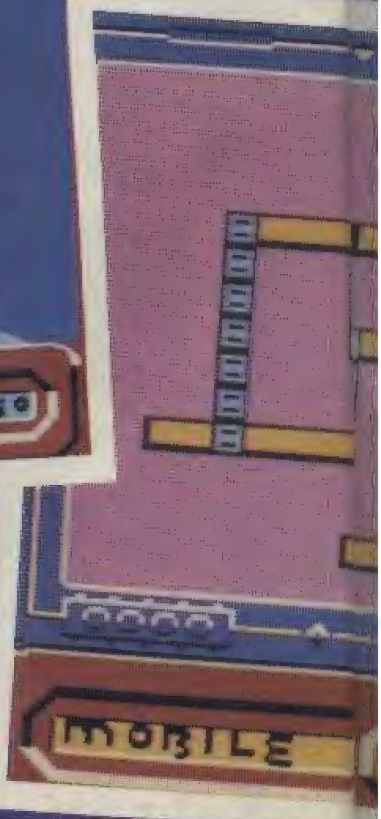
POWER POINTS
Klepto can recharge his flagging batteries and put the smile back on his face by trundling over one of these

The edges of the city known as Quazatron hang out into space — mind you don't fall off!



Producer: Hewsons
Retail price: **£8.95**
Author: **Steve Turner**

Q·U·A·Z·A·T·R·O·N

A CRASH Smash

The underground citadel of Quazatron is run by an evil cult of mutant droids, hell-bent on destroying the human race. Sob, whimper. But . . . do not despair help is at hand in the form of KLP2, a psychotic Meknotech droid.

Klepto, as he is known, is a droid with *A Past*. In his youth he was exposed to a rare form of radiation which induced a type of droid madness. His persistent habit of dismantling everything mechanical in sight has landed him in serious trouble — he was expelled from droid school for demolishing his teacher. Despite painstaking re-programming, he remains a liability, but now he has a chance to prove his worth by eliminating the alien droids from the planet Quartech.

The droids patrolling the levels of Quazatron are pretty tough cookies, graded in security classes from one (very tough) to nine. They have some deadly weapons systems, and are virtually invincible — all previous attacks on the citadel failed. Now a new grappling system has been developed for droid-to-droid combat, and on account of his anti-social disposition Klepto has been chosen to test the prototype in a combat situation. He is expendable, after all!

CRITICISM

" Quazatron owes a debt to the Commodore hit, Paradroid; though the graphics are very different, the lift sequence and grapple screen are almost identical. It's generally a great game, that's really fun to play and is instantly appealing. The only real complaint that I've got is that the scrolling routine when you move about could be a lot smoother, but as this doesn't interfere with gameplay, it's still one of the best games I've played on the Spectrum. If you have seen the Commodore game and liked it, I'd recommend you get Quazatron right now! "

At the start of the game Klepto is transported to the underground citadel of Quazatron. He must trundle about locating the enemy droids, dismantling them, pushing them off their programmed courses or blasting them to smithereens with his laser. *Quazatron* can be approached in two ways: on one level it is a shoot em up — destroy all the enemy droids and you win; but a wealth of strategical gameplay lurks below the surface. Whenever Klepto uses the prototype grappling system successfully, and overcomes an alien droid, his penchant for taking things to bits allows him to scavenge droid parts and upgrade himself.

Klepto toddles up and down ramps looking for droids to scrap with. Ramming into a patrolling droid allows Klepto to use the grappling system, which breaks into the enemy droid's circuits: the fight is on. The grapple system in the game has been adapted from Hewson's Commodore game, *Paradroid*, and the aim is to win control of as many of the central bars on the grapple screen as you can.

Using pulsers which are fired into the circuits, you must turn at least seven of the twelve central bars on the screen to your colour to win — the more bars you control at the end of the time limit, the more resounding the victory and the less damage done to the alien droid's systems. If the grapple is won, Klepto can help himself to his victim's undamaged components — including the drive unit, weapon system, power unit, chassis and any other special devices that may be present. He's a regular robotic carrion collector is Klepto.

The lowest class of alien droid, Class 9, is relatively easy to outgrapple, but the goodies that can be scavenged from its hulk are not as attractive as those found on higher class droids. Care should be taken when choosing which parts to take from a vanquished opponent — it's all very well pinching a super dooper weapon system for instance, but if Klepto has a wimpy power unit then it'll rapidly be drained by the demands made on it by the new equipment.

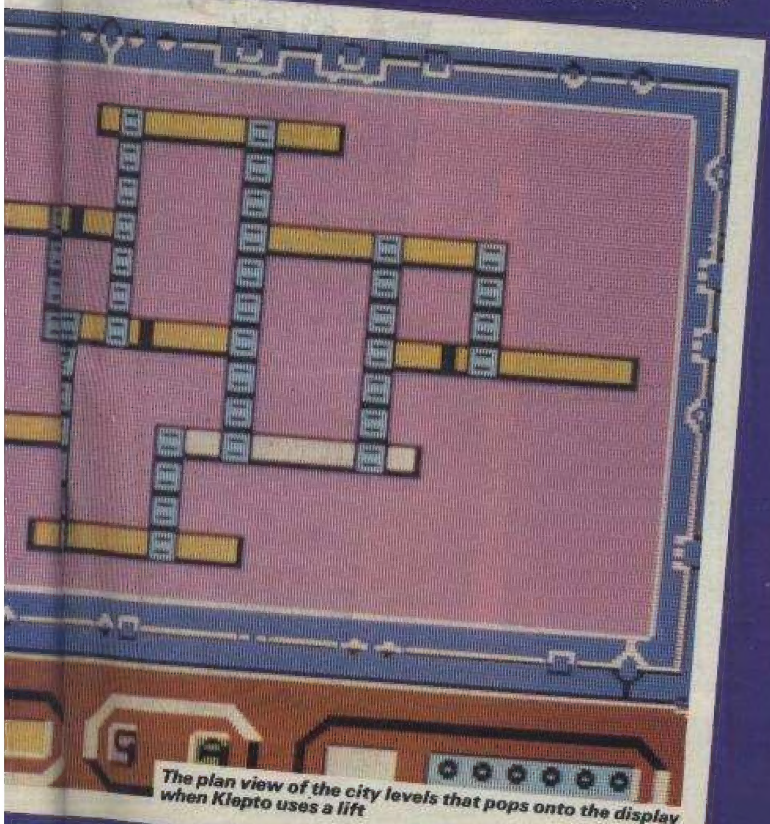
Computer consoles scattered around the cityscape can be used to pick up information that comes in very handy when taking a strategic approach to the game. Trundling up to a terminal and pressing fire logs Klepto on to the system and calls up an icon menu from which a map of the current level of the city, a plan of the entire city and the droid data library can be called up. The data library displays Klepto's current status,

CRITICISM

" Quazatron is a true masterpiece. Nothing about it is of a bad standard — sound, graphics, playability and addictiveness, they're all there. Basically, this is the C64 game Paradroid jazzed up a bit with pretty graphics and redesigned for the Spectrum. It is very easy to get into if you've played the Commodore game, but I suggest you study the instructions for a while if you haven't, as they are complex and could be confusing. The graphics are about the best I've ever seen on this type of game: the characters are excellently drawn and full of detail, as is the city in its many levels. Graphically, my only nag is that the scrolling is too slow. The sound is excellent, with a brilliant tune on the title screen, and the effects during the game are second to none. I can't really see myself putting this one down for a good while yet as it is fun to play and very compelling. I strongly recommend Quazatron to everyone. "

CRITICISM

" Steve Turner has done a wonderful job of producing a Paradroid type game — I reckon this is one of the best games ever to come out on the Spectrum. Playability is superb: the game'll keep you at the computer for ages wondering how you're going to kill the next droid that comes along. The levels are very detailed and contain lots of baddies to short circuit. The grapple mode is very good and needs lots of patience and skill to play. The character you control is very well animated and there are lots of nice touches to the game. The sound at the start is a very good two channel simulation. Addictive qualities are enhanced by the fact that it is quite easy to finish one level, but a different matter altogether to go around and clear the whole city. This is definitely one game that will keep you at your Spectrum for months. "

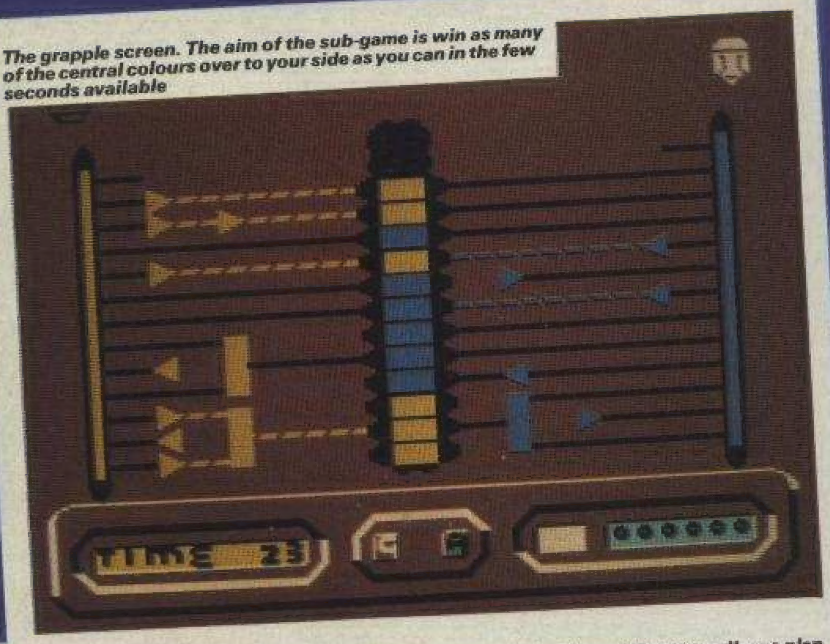


The plan view of the city levels that pops onto the display when Klepto uses a lift

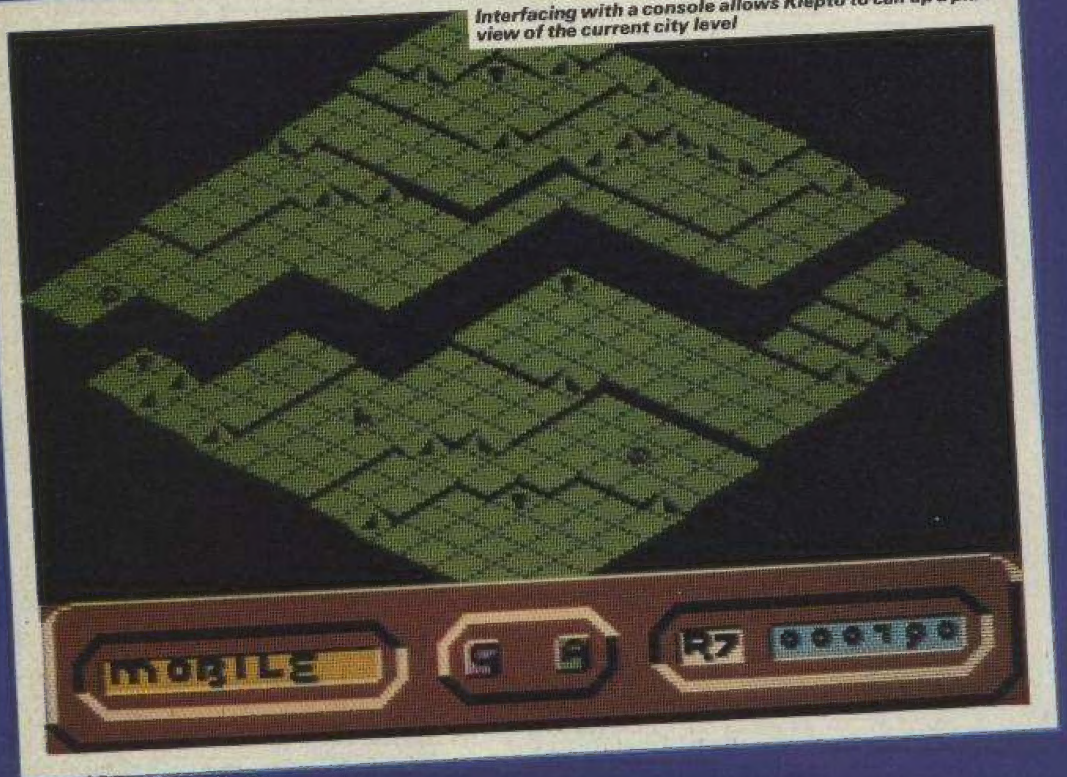
and lists the weapon, drive, power unit, chassis and devices currently installed. Details of the equipment to be found on enemy droids in the same or lower security classes as Klepto may be called up — vital for planning a rational upgrade path.

Travel between city levels is effected by moving Klepto onto a lift square set in the rampway and pressing fire — a plan view of the city comes onto the screen and Klepto can whizz up or down the lift shaft he is in. All this grappling and zooming round drains Klepto's energy — and if his power unit is low-grade compared to the weapon systems or chassis that has been gained by grappling, then the power drain is all the more rapid. Klepto's power unit can be recharged by moving onto power squares found on some levels, but points are lost for each recharge. As a power unit runs down, the amount of charge it can hold reduces. Eventually a new unit will have to be grappled from an alien if Klepto is to survive.

The city's rampways are displayed in a scrolling window on the screen in 3D perspective. Klepto moves around the diagonals of the playing area, and can only fire his weapon system while he's on the move and in weapon mode as opposed to grapple mode. Klepto's energy status is revealed by the speed at which his head rotates — when he's fully charged it whizzes round and a smile covers his countenance. As his power reserves dwindle, Klepto begins to look glum. Only one life is supplied in the game, so the aim is to keep Klepto smiling. Get grappling!



The grapple screen. The aim of the sub-game is win as many of the central colours over to your side as you can in the few seconds available



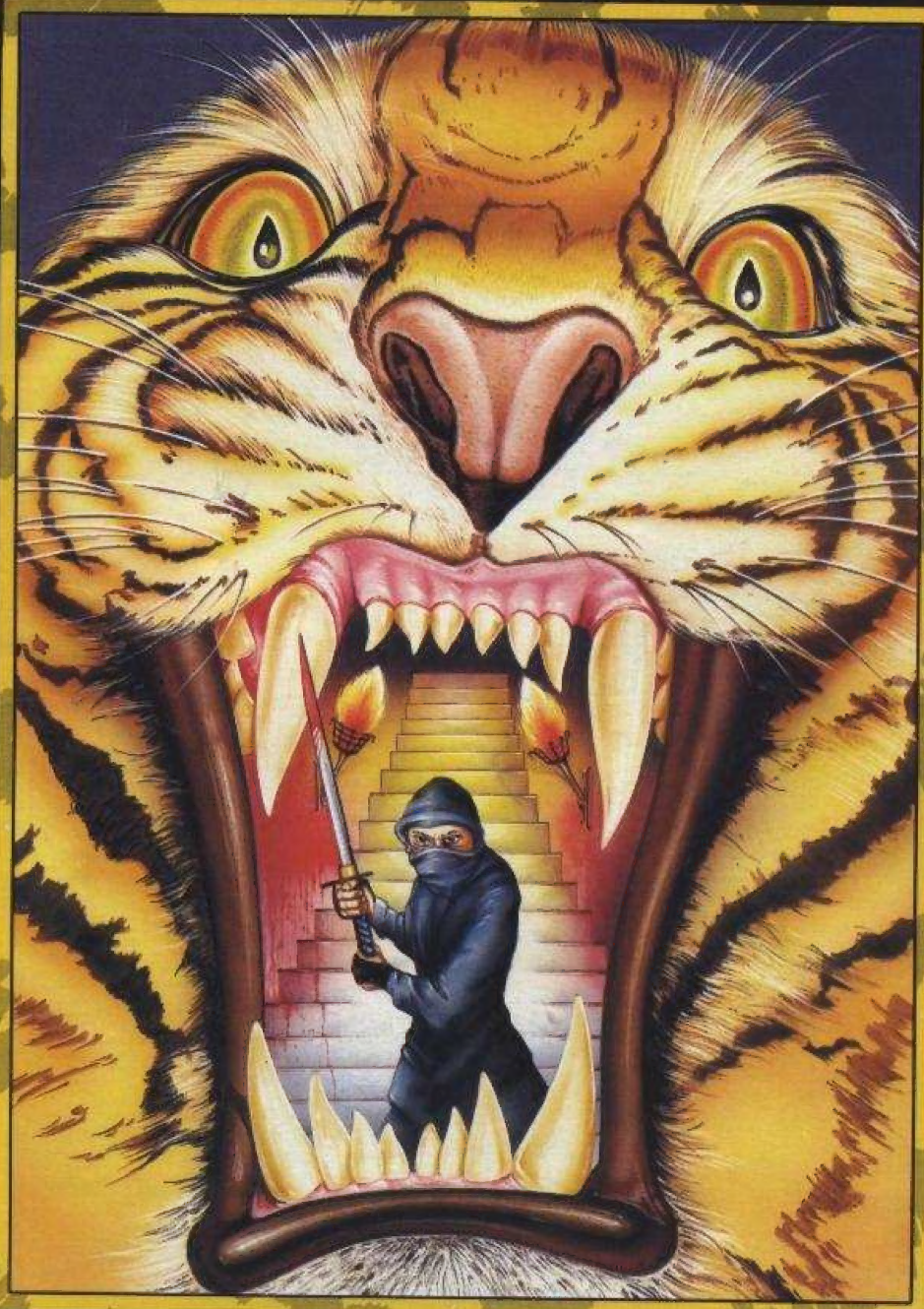
Interfacing with a console allows Klepto to call up a plan view of the current city level

COMMENTS

Control keys: A, S, D, F, G left and up, H, J, K, L right and up, B, N, M, SYM SHIFT left and down, Z, X, C, V, CAPS SHIFT right and down, ENTER to fire, W to toggle autofire, P to pause
Joystick: Kempston, Cursor, Interface
Keyboard play: straightforward and responsive
Use of colour: attractive
Graphics: detailed, with cunning 3D but a little slow to scroll
Sound: first rate
Skill levels: one
Screens: multilevel scrolling city
General rating: An excellent game

Use of computer	**94%**
Graphics	**93%**
Playability	**93%**
Getting started	**89%**
Addictive qualities	**93%**
Value for money	**93%**
Overall	**94%**

THE WAY OF THE TIGER



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